



**PHASE V STATUS REPORT IN
SUPPORT OF REMEDY
OPERATION STATUS**

**MOBIL STATION #1436
309 LOWELL STREET
ANDOVER, MASSACHUSETTS
MASSDEP RTN 3-3072**

WHERE BUSINESS AND THE ENVIRONMENT CONVERGE

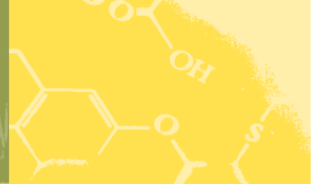
Prepared for:
Global Companies LLC
800 South Street, Suite 500
Waltham, MA 02454

ECS Project No. 95-214880
August 2016

Prepared by:
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WHERE BUSINESS AND THE ENVIRONMENT CONVERGE



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August 23, 2016
ECS Project No. 95-214880

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup
Northeast Regional Office
205B Lowell Street
Wilmington, Massachusetts 01887

RE: Phase V ROS Status Report
Mobil Station No. 1436
309 Lowell Street
Andover, Massachusetts
MassDEP RTN 3-3072

Dear Sir or Madam:

On behalf of Global Companies LLC (Global), Environmental Compliance Services, Inc. (ECS) has prepared the following Phase V ROS Status Report for the Disposal Site located at 309 Lowell Street in Andover, Massachusetts (here-in-after referred to as the "Site"). The Disposal Site is being tracked under MassDEP RTN 3-3072. Global assumed responsibility from ExxonMobil Corporation for the environmental response actions being conducted at the Site on September 8, 2010. A Conceptual Site Model (CSM), which includes a timeline of key regulatory dates, is included as Attachment I. A list of abbreviations and acronyms commonly associated with MCP reporting is included in Attachment II. A Site Locus Map is included as Figure 1, an Aerial Overview Plan is included as Figure 2, and a Site Plan, which depicts groundwater flow direction beneath the Site based on groundwater elevation data collected during the June 7, 2016 groundwater sampling event, is included as Figure 3. Graphs depicting the historical concentration trends for select groundwater contaminants and monitoring wells are included as Graphs 1 through 3.

Monitoring Period: February 2016 through July 2016

Selected CRA: Monitored Natural Attenuation

Work Performed: Two quarterly groundwater sampling events were conducted on March 8, 2016 and June 7, 2016.

Groundwater Classification: GW-1, GW-2 and GW-3

1.0 GROUNDWATER MONITORING PROGRAM AND RESULTS

1.1 Groundwater Monitoring Program

Two groundwater sampling events were completed during this reporting period. On March 8 and June 7, 2016 groundwater samples were collected from select monitoring wells and submitted to Contest Analytical Laboratory (Contest) of East Longmeadow, Massachusetts for laboratory analysis of VPH according to the MassDEP VPH Method. Additionally, select samples were submitted for analysis of methane, nitrate, sulfate, dissolved iron, and dissolved manganese. All samples were collected and analyzed according to the MassDEP CAM (finalized on June 25, 2004). This data has presumptive certainty for precision and accuracy. A review of PARCCS

indicates that the data collected during these sampling events are of suitable quality to support the conclusions of this and future reports. A summary of the groundwater monitoring program is presented in Table 1.

1.2 Groundwater Sample Laboratory Analytical Results

The laboratory analytical results and field geochemical data for the groundwater samples collected in March and June 2016 are summarized in Tables 2 and 3, and are discussed below. Copies of the laboratory analytical reports for the groundwater sampling events are provided in Attachment III.

1.2.1 March 2016

On March 8, 2016, groundwater samples were collected from monitoring wells OW-12, OW-13, MW-1, MW-2R, MW-3, MW-4 and OW-ED. The groundwater samples were submitted for laboratory analysis for VPH.

C₉-C₁₀ aromatic hydrocarbons were detected at a concentration greater than the respective MCP Method 1 GW-1 Groundwater Standard in the sample collected from OW-13.

Dissolved-phase VPH target analytes were not detected at concentrations greater than their respective MCP Method 1 GW-1, GW-2 or GW-3 Groundwater Standards in any other groundwater samples collected in March 2016.

1.2.2 June 2016

On December 16, 2015, groundwater samples were collected from monitoring wells OW-12, OW-13, OW-ED, MW-1, MW-2R and MW-3. The groundwater samples were submitted for laboratory analysis for VPH.

C₉-C₁₀ aromatic hydrocarbons were detected at a concentration greater than the respective MCP Method 1 GW-1 Groundwater Standard in the sample collected from OW-13.

Dissolved-phase VPH target analytes were not detected at concentrations greater than their respective MCP Method 1 GW-1, GW-2 or GW-3 Groundwater Standards in any other groundwater samples collected in June 2016.

1.3 MNA Results

ECS submitted groundwater samples for laboratory analysis of various parameters indicative of primary and secondary “lines of evidence” to determine if MNA is occurring at the Site. The highest concentrations of dissolved-phase VPH target analytes have historically been located in the vicinity of on-site groundwater monitoring wells OW-13 and MW-2. The concentrations of dissolved-phase VPH target analytes detected in these wells, as well as in OW-12 and MW-4, which have historically exhibited elevated concentrations of VPH target analytes, have decreased over time, as illustrated in Graphs 1 through 3. A linear trend line for each contaminant demonstrates a decreasing trend over time supporting the primary line of evidence that biodegradation is occurring.

During the most recent groundwater sampling events (March and June 2016), the groundwater samples collected from monitoring wells MW-1, OW-ED, OW-12 and OW-13 were submitted for laboratory analysis for methane, nitrate, sulfate, and dissolved iron and manganese, and were monitored for field geochemical parameters (Table 3). This data was compiled and compared to established literature values for further evaluation (Table 4).

The MNA data for the most recent sampling event completed in June 2016 indicate that biodegradation processes are continuing to occur beneath the Site, though slowing due to decreased dissolved-phase contaminant concentrations. This is evidenced by the higher concentration of dissolved iron as well as the elevated concentration of methane observed in the target area of the Site, which indicates that anaerobic biodegradation is continuing to occur to some extent within the subsurface. The MNA program continues to be effective at reducing dissolved-phase contaminant concentrations in groundwater.

2.0 SIGNIFICANT MODIFICATIONS TO THE OPERATION, MAINTENANCE AND/OR MONITORING PROGRAM

Due to the decreased contaminant concentrations observed across the Site, the monitoring well sampling program has been modified to include quarterly targeted sampling events in support of Site closure. ECS will continue to monitor dissolved-phase concentrations at OW-13, the one monitoring well currently exhibiting VPH concentrations above applicable standards, and evaluate and modify the monitoring program as necessary. The monitoring program will continue as follows:

- Quarterly groundwater sampling events will be conducted (March, June, September and December) including the collection of groundwater samples for laboratory analysis for VPH and MNA parameters from up to ten targeted wells.

3.0 EVALUATION OF THE PERFORMANCE OF THE REMEDIAL ACTION

Groundwater recovery, AS, and SVE systems were operated at the Site between January 1991 and March 2007. The operation of these remediation systems was discontinued in March 2007 and a groundwater monitoring program was initiated to determine if the remedial goals had been met at the Site. It is the opinion of ECS that the active remedial system successfully reduced dissolved-phase VPH concentrations in groundwater beneath the Site to levels appropriate for MNA.

Historical groundwater monitoring results indicate that the dissolved-phase VPH concentrations continue to follow decreasing trends and that the dissolved-phase contaminant plume is shrinking in size as a result of natural attenuation processes. Although select dissolved-phase VPH target analyte concentrations still periodically exceed their respective MCP Method 1 GW-1 Groundwater Standards in select on-site groundwater monitoring wells, the frequency of exceedances and the concentrations observed are continuing to decrease. During the groundwater sampling events completed in March and June 2016, concentrations of petroleum analytes were only detected above their respective, applicable MCP Method 1 GW-1 Groundwater Standards in one monitoring well (OW-13). No other Method 1 Groundwater Standard exceedances were detected during this monitoring period.

MTBE, historically the primary contaminant of concern with respect to off-property impacts, has not been detected above its applicable MCP Method 1 GW-1 groundwater standard in any monitoring well since 2009, with the exception of OW-ED during the September 2015 sampling event. The MNA program has successfully demonstrated that the downgradient extent of dissolved-phase VPH contamination is shrinking, and thus the Disposal Site boundary is not expanding.

It is the opinion of ECS that performance standards outlined in 310 CMR 40.0893 (2) and as presented in the Phase IV RIP, are being accomplished. ECS is not aware of any conditions or problems that are or may be affecting the performance of the remedial action at the Site.

4.0 PROPOSED FUTURE ACTIVITIES

The following is the proposed schedule for future activities at the Site:

- Conduct quarterly groundwater sampling events as outlined in Section 2.0 at target groundwater monitoring well locations (identified in the Phase V Status Report submitted in February 2011) in order to evaluate the effectiveness of the CRA being performed;
- Prepare and submit Phase V ROS Reports on a semi-annual basis (February and August) until such time that a Permanent Solution is feasible and the Site is eligible for a Permanent Solution; and,
- ECS will complete an evaluation of all soil data available for the Site in order to determine if additional data is necessary to support Site closure.

5.0 PUBLIC INVOLVEMENT

As required by the Public Involvement Plan for the Site, copies of this Phase V ROS Report will be forwarded to the following information repositories:

- Memorial Hall Library
Elm Square
Andover, Massachusetts 01810
(978) 623-8400
- Department of Community Development and Planning
Board of Health Department
36 Bartlett Street
Andover, Massachusetts 01810
(978) 623-8295

Copies of the letters accompanying this ROS Status Report to the above information repositories are included in Attachment IV. Notices of availability of this Phase V ROS Report will be forwarded to the parties listed in Table 5 - Public Involvement Plan mailing list, with the exception of those previously determined to be no longer deliverable. Additionally, prior to sampling events, notifications will be sent to the owners of the adjacent parcels where monitoring wells are located which are part of the ongoing monitoring program, and copies of analytical data collected on those properties have been, and will continue to be, forwarded to the owners in accordance with 310 CMR 40.1403(10).

Should you have any questions regarding the enclosed information, please feel free to contact either Jason Frigon of Global Companies, LLC or the undersigned at (781) 246-8897.

Sincerely,
ENVIRONMENTAL COMPLIANCE SERVICES, INC.



Matthew Carey
Senior Project Manager



Daniel W. Felten, P.E., LSP, LEP
Senior VP, Technology

FIGURES:

- | | |
|----------|----------------------|
| Figure 1 | Site Locus |
| Figure 2 | Aerial Overview Plan |

Figure 3 Site Plan with Groundwater Elevation Contours (6/7/2016)

GRAPHS:

Graph 1 VPH Concentration vs. Depth to Groundwater – MW-2
Graph 2 VPH Concentration vs. Depth to Groundwater – MW-4
Graph 3 VPH Concentration vs. Depth to Groundwater – OW-12

TABLES:

Table 1 Groundwater Monitoring Program
Table 2 Concentrations of Volatile Petroleum Hydrocarbons (VPH) Detected in
 Groundwater
Table 3 Geochemical and Monitored Natural Attenuation Data
Table 4 Lines of Evidence for MNA
Table 5 Public Involvement Plan Mailing List

ATTACHMENTS:

Attachment I Conceptual Site Model
Attachment II Abbreviations and Acronyms
Attachment III Laboratory Analytical Results
Attachment IV Copies of Public Notification Documents

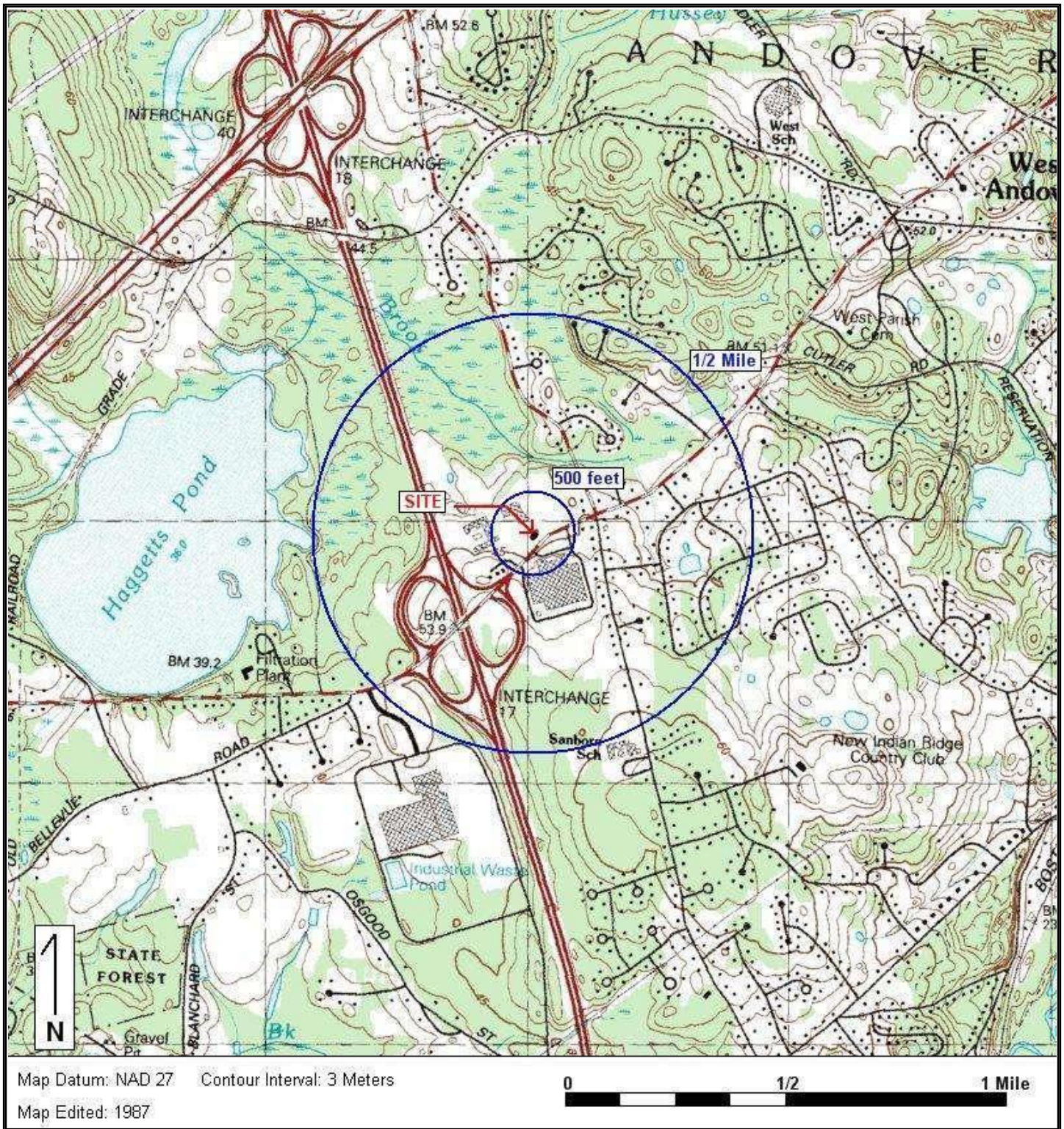
FIGURES



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Mobil Station No. 1436
309 Lowell St
Andover, MA 1810

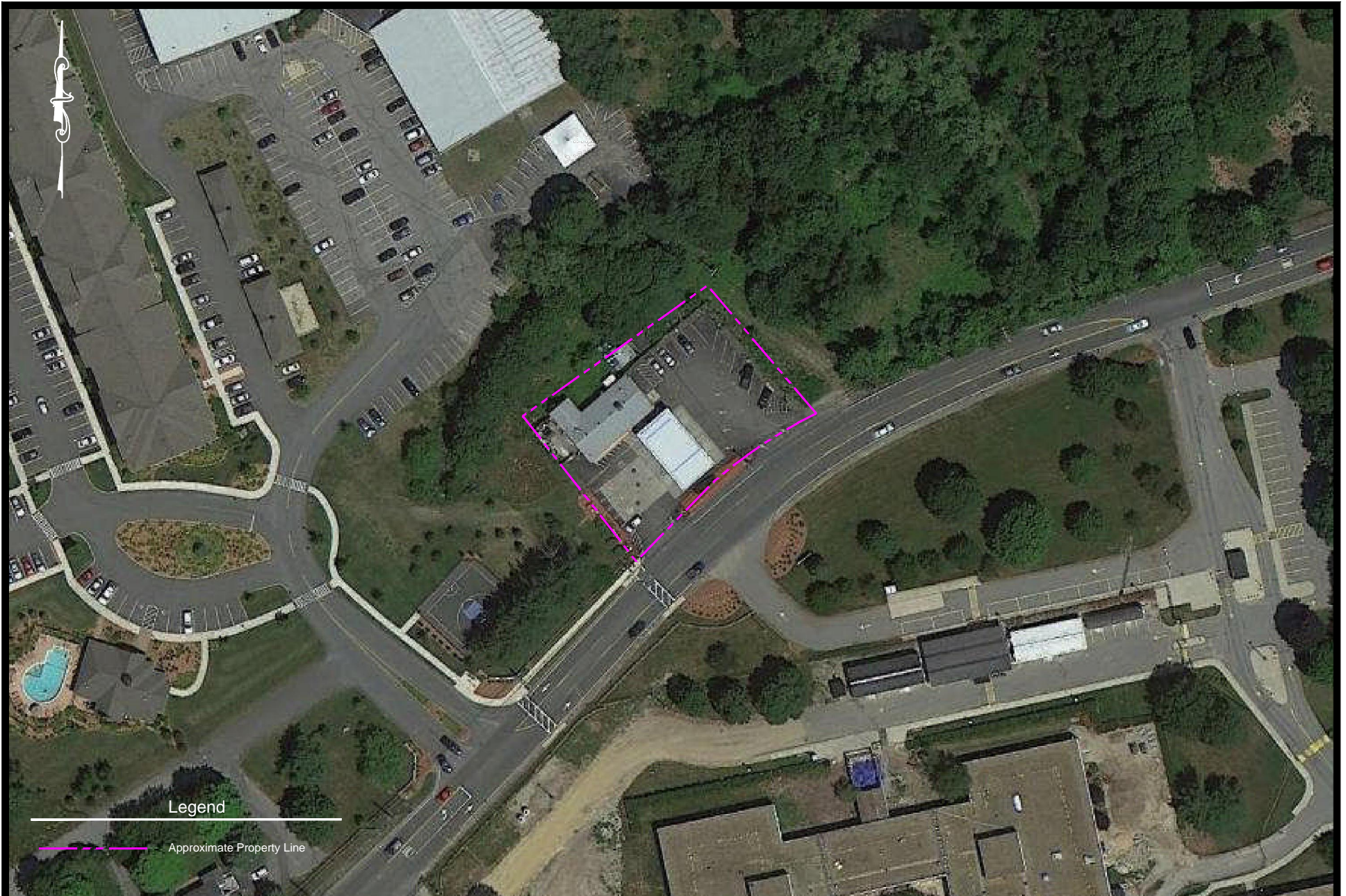
Figure 1: SITE LOCUS



Base Map: U.S. Geological Survey; Quadrangle Location: Lawrence, MA

Lat/Lon: 42° 38' 57" NORTH, 71° 10' 58" WEST - UTM Coordinates: 19 321071 EAST / 4724170 NORTH

Generated By: Rich Walas



Legend

Approximate Property Line

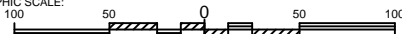


10 State Street * Woburn, MA 01801
Phone: 781-246-8897 Fax: 781-246-8950

CLIENT:

Global Companies LLC

GRAPHIC SCALE:



PROJECT:

Mobil Station No. 1436

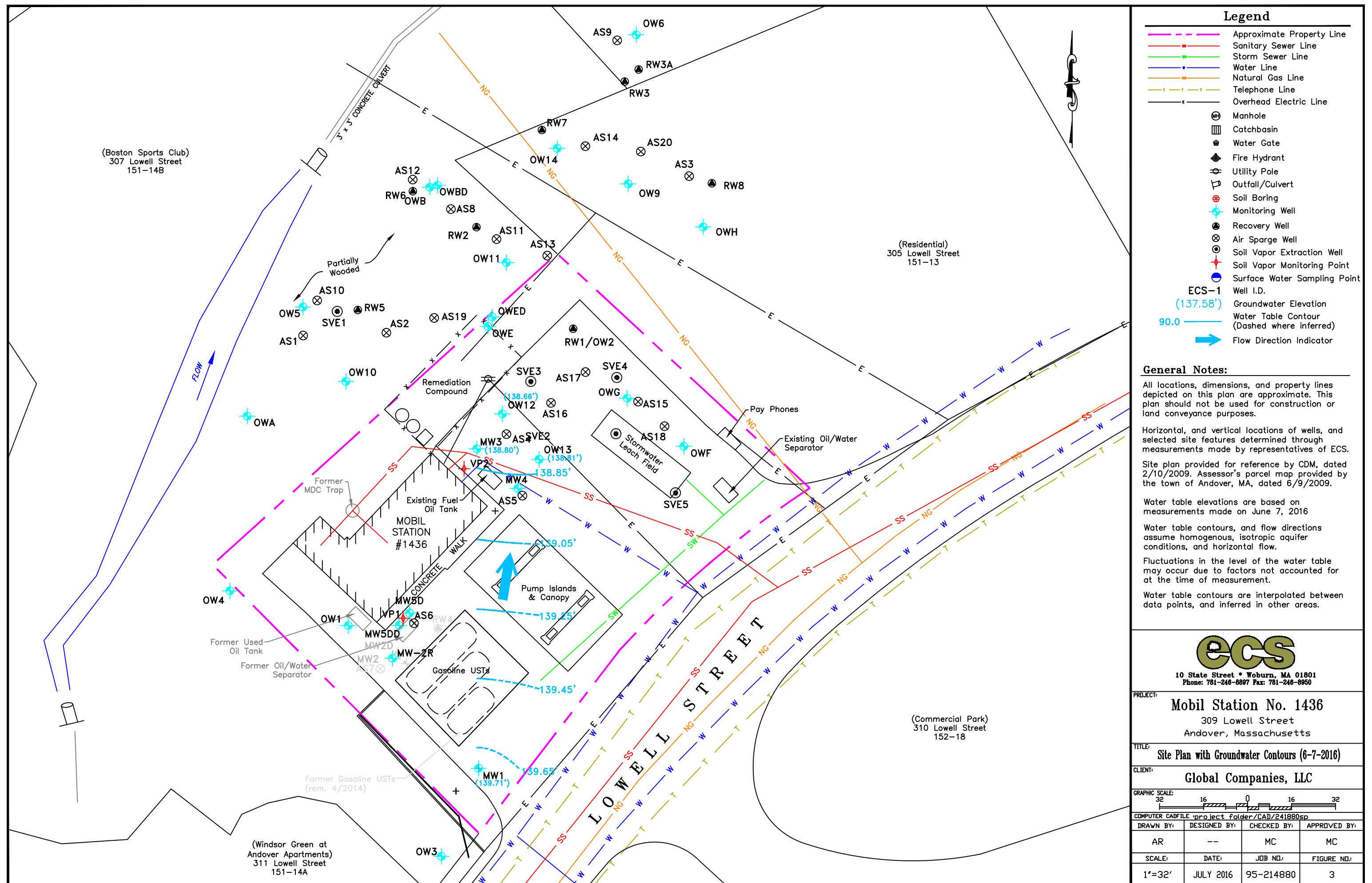
309 Lowell Street
Andover MA

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Aerial Overview

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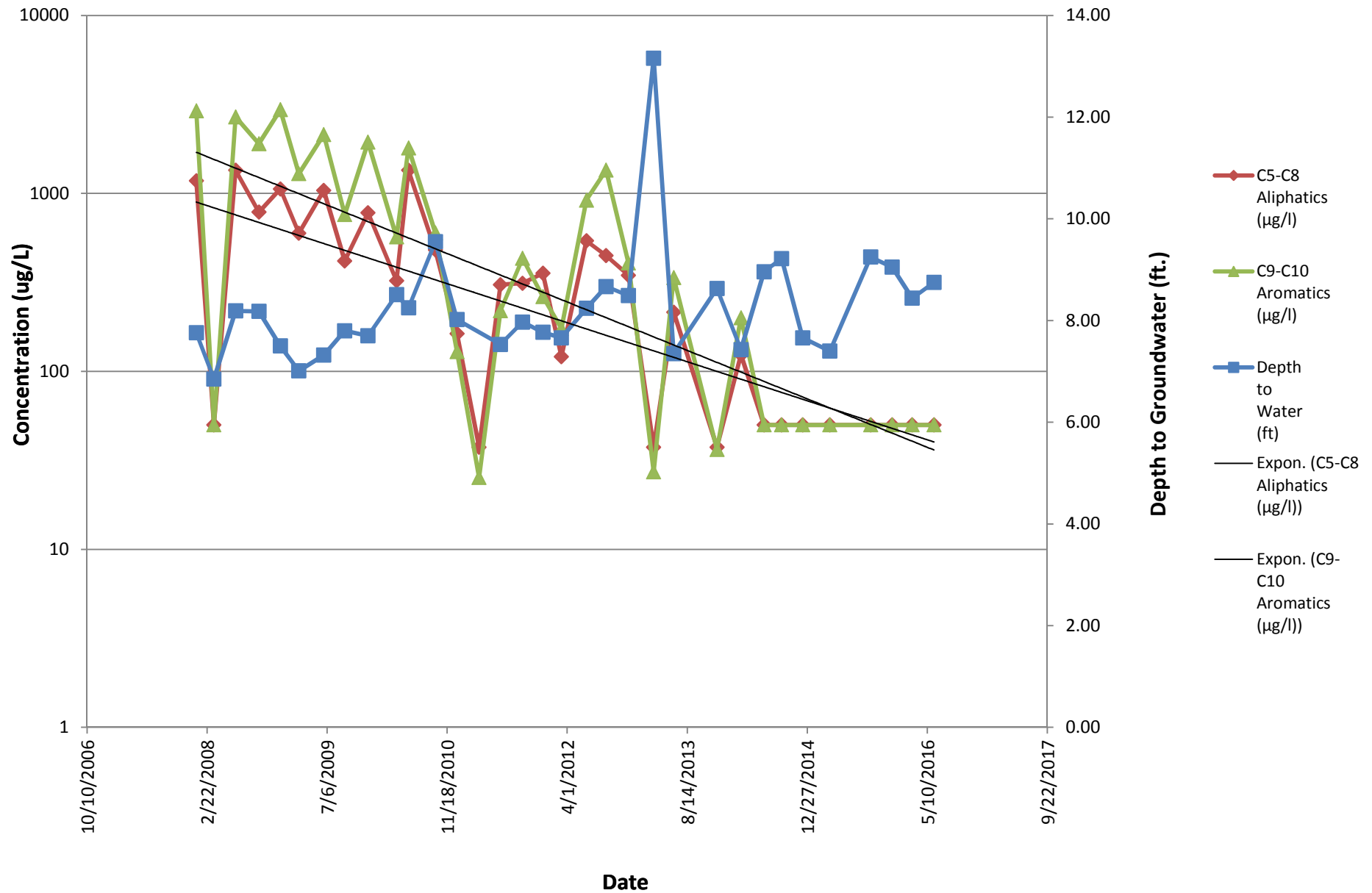
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1" = 100'	Oct 2013	95-214880	2



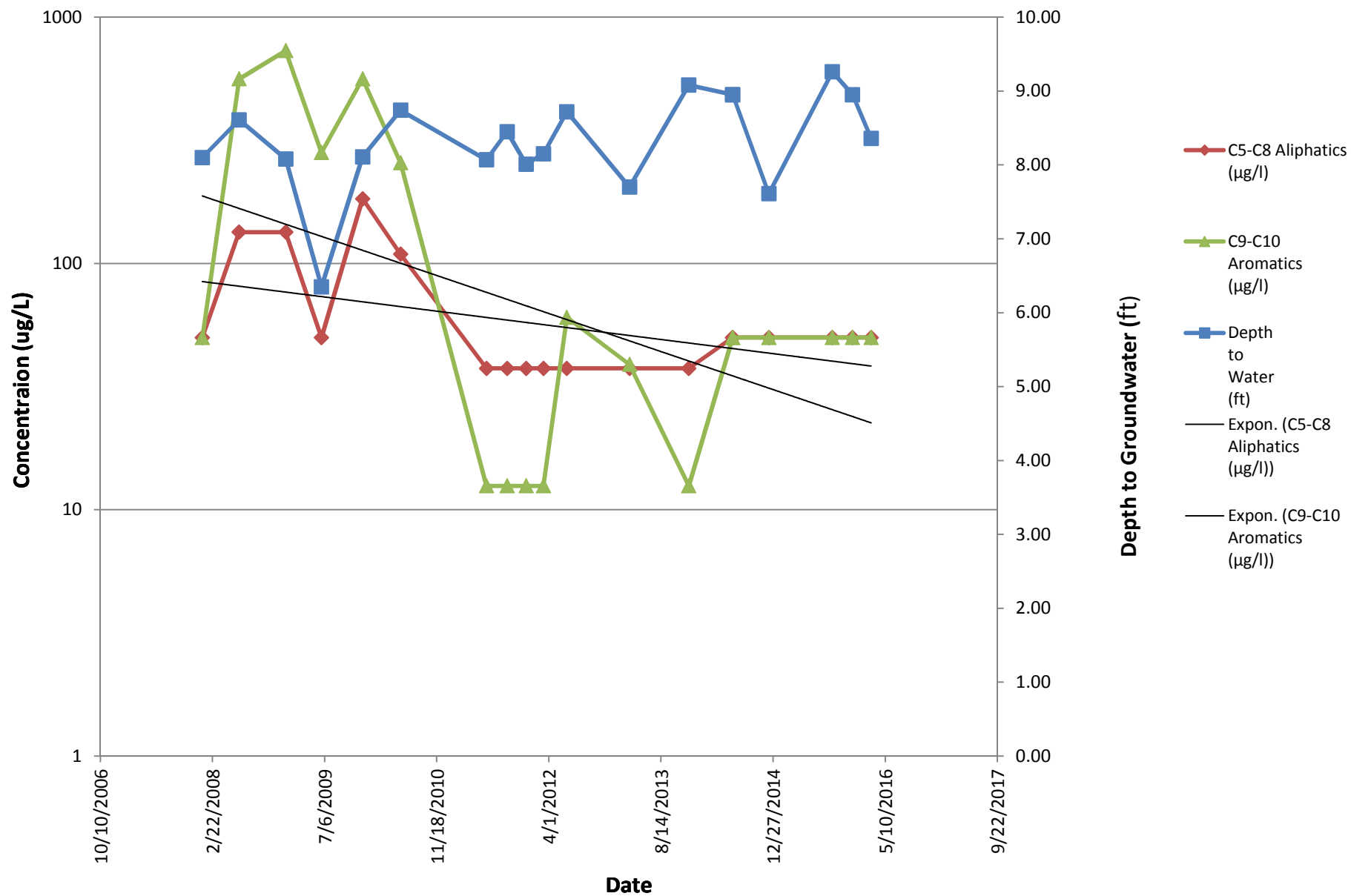
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GRAPHS

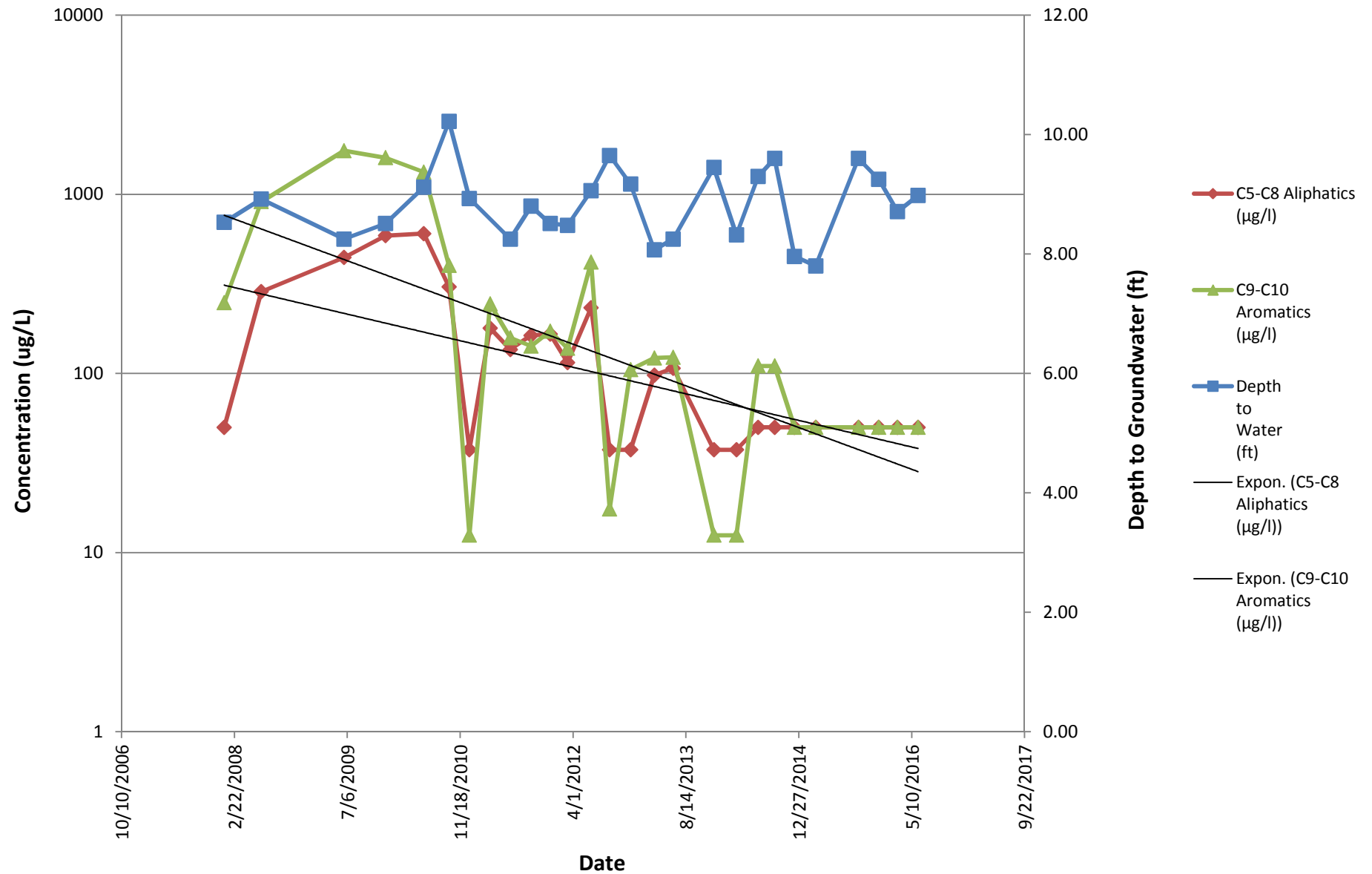
Graph 1
VPH Concentration vs. Depth to Groundwater - MW-2



Graph 2
VPH Concentration vs. Depth to Groundwater - MW-4



Graph 3
VPH Concentration vs. Depth to Groundwater - OW-12



TABLES

<p>95-214880 Global Companies, LLC Mobil Station No. 1436 309 Lowell Street Andover, MA</p>	<p>Table 1 Groundwater Monitoring Program</p>	
Sampling Date:	March 8, 2016 Quarterly Sampling Event	June 7, 2016 Quarterly Sampling Event
Sample Method:	Low flow sampling	Low flow sampling
Laboratory Analysis:	VPH, methane, nitrate, sulfate, total and dissolved iron and manganese.	VPH, methane, nitrate, sulfate, total and dissolved iron and manganese.
Field Measurements:	Temperature, specific conductivity, Dissolved Oxygen (DO), pH, Oxidation Reduction Potential (ORP), and turbidity	Temperature, specific conductivity, Dissolved Oxygen (DO), pH, Oxidation Reduction Potential (ORP), and turbidity
Laboratory:	Contest Analytical Laboratory of East Longmeadow, MA (Contest)	Contest
Sampling points planned:	7 wells	7 wells
Number of wells gauged:	7 wells	6 wells
Number of wells sampled:	7 wells	6 wells
Completeness:	100%	86%
Wells sampled:	OW-12, OW-13, MW-1, MW-2R, MW-3, MW-4, OW-ED	OW-12, OW-13, MW-1, MW-2R, MW-3 and OW-ED

95-214880 Global Companies LLC Mobil Station No. 1436 309 Lowell Street Andover, MA		Table 2 Concentrations of Volatile Petroleum Hydrocarbons (VPH) Detected in Groundwater												
Well No. (GW Class) Screen Interval (ft.)	Sampling Date	Top of Casing Elevation (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	Ground Water Elevation (ft)	Benzene (µg/l)	Toluene (µg/l)	Ethyl- benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)	Naph- thalene (µg/l)	C ₅ -C ₈ Aliphatics (µg/l)	C ₉ -C ₁₂ Aliphatics (µg/l)	C ₉ -C ₁₀ Aromatics (µg/l)
MCP Method 1 Standards				GW-1		5	1,000	700	10,000	70	140	300	700	200
				GW-2		2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000
				GW-3		10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000
OW-1 (GW-1,2,3) 5-15'	7/30/1998	148.35	8.51	ND	139.84	<1.0	<1.0	<1.0	<3	19	NA	NA	NA	NA
	9/11/1998	148.35	9.41	ND	138.94	<1.0	<1.0	<1.0	<3	29	NA	NA	NA	NA
	10/26/1998	148.35	8.84	ND	139.51	<1.0	<1.0	<1.0	<3	40	NA	NA	NA	NA
	11/13/1998	148.35	9.02	ND	139.33	<1.0	<1.0	<1.0	<3	35	NA	NA	NA	NA
	12/17/1998	148.35	9.15	ND	139.20	<1.0	<1.0	<1.0	<3	37	NA	NA	NA	NA
	1/6/1999	148.35	8.69	ND	139.66	<1.0	<1.0	<1.0	<3	31	NA	NA	NA	NA
	2/9/1999	148.35	7.80	ND	140.55	<1.0	<1.0	<1.0	<3	8	NA	NA	NA	NA
	3/29/1999	148.35	7.38	ND	140.97	<1.0	<1.0	<1.0	<3	9	NA	NA	NA	NA
	6/24/1999	148.35	8.75	ND	139.60	<1.0	<5	<5	<15	5.5	<5	<100	<100	<100
	11/20/2001	148.35	8.10	ND	140.25	<5.0	<5.0	<5.0	<10	247	<5.0	<50	<50	<50
	2/26/2001	148.35	8.30	ND	140.05	<1.0	<5.0	<5.0	<15	50.8	<5	<100	<100	<100
	7/16/2001	148.35	8.73	ND	139.62	<5.0	<5.0	<5.0	<10	55.8	<5	<50	<50	<50
	1/22/2002	148.35	9.13	ND	139.22	<5.0	<5.0	<5.0	<10	30.4	<5.0	<50	<50	<50
	5/17/2002	148.35	8.10	ND	140.25	<5.0	<5.0	<5.0	<10	20.4	<5.0	<50	<50	<50
	10/2/2002	147.98	9.92	ND	138.06	<2.0	<2.0	<2.0	<4.0	6	<3.0	<50	<50	<50
	11/13/2003	147.98	8.81	ND	139.17	<2.0	<2.0	<2.0	<4.0	5.1	<3.0	<50	<50	<50
	OW-3 (GW-1,3) 5-15'	7/30/1998	149.86	9.21	ND	140.65	<1.0	<1.0	<1.0	<3	5	NA	NA	NA
9/11/1998		149.86	9.92	ND	139.94	<1.0	<1.0	<1.0	<3	3	NA	NA	NA	NA
10/26/1998		149.86	9.68	ND	140.18	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
11/13/1998		149.86	9.91	ND	139.95	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
12/17/1998		149.86	9.71	ND	140.15	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
1/6/1999		149.86	9.60	ND	140.26	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
2/9/1999		149.86	8.15	ND	141.71	<1.0	<1.0	<1.0	<3	11	NA	NA	NA	NA
3/29/1999		149.86	7.54	ND	142.32	<1.0	<1.0	<1.0	<3	37	NA	NA	NA	NA
6/24/1999		149.86	9.12	ND	140.74	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
11/20/2000		149.86	8.64	ND	141.22	<5.0	<5.0	<5.0	<10	489	<5.0	<50	<NA	<50
2/26/2001		149.86	9.20	ND	140.66	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
7/16/2001		149.86	9.00	ND	140.86	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
1/22/2002		149.86	9.82	ND	140.04	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
5/18/2004		149.55	9.41	ND	140.14	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
11/17/2004		149.55	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
6/20/2005		149.55	9.31	ND	140.24	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
12/16/2005		149.55	8.86	ND	140.69	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
6/27/2006		149.55	8.11	ND	141.44	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
12/14/2006		149.55	9.36	ND	140.19	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
7/11/2007		149.55	9.80	ND	139.75	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
1/8/2008		149.55	9.15	ND	140.4	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
6/20/2008	149.55	9.65	ND	139.9	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100	
1/14/2009	149.55	9.04	ND	140.51	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	
6/22/2009	149.55	8.85	ND	140.7	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	
12/23/2009	149.55	8.86	ND	140.69	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	
6/10/2010	149.55	9.81	ND	139.74	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	
OW-4 (GW-1,3) 2-15'	7/30/1998	147.61	7.92	ND	139.69	<1.0	<1.0	<1.0	<3	3	NA	NA	NA	NA
	9/11/1998	147.61	8.89	ND	138.72	<1.0	<1.0	<1.0	<3	3	NA	NA	NA	NA
	10/26/1998	147.61	11.98	ND	135.63	<1.0	<1.0	<1.0	<3	99	NA	NA	NA	NA
	11/13/1998	147.61	8.35	ND	139.26	<1.0	<1.0	<1.0	<3	3	NA	NA	NA	NA
	12/17/1998	147.61	8.52	ND	139.09	<1.0	<1.0	<1.0	<3	4	NA	NA	NA	NA
	1/6/1999	147.61	7.94	ND	139.67	<1.0	<1.0	<1.0	<3	5	NA	NA	NA	NA
	2/9/1999	147.61	7.35	ND	140.26	<1.0	<1.0	<1.0	<3	5	NA	NA	NA	NA
	3/29/1999	147.61	7.15	ND	140.46	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	6/24/1999	147.61	8.20	ND	139.41	<1.0	<5.0	<5.0	<15	82.2	<5	<100	<100	<100
	11/4/1999	147.61	7.84	ND	139.77	<1.0	<5.0	<5.0	<15	6.2	<5.0	<100	<100	<100
	11/20/2000	147.61	7.65	ND	139.96	<5.0	<5.0	<5.0	<10	50.7	<5.0	<50	<50	<50
	2/26/2001	147.61	7.62	ND	139.99	<1.0	<5.0	<5.0	<15	77.7	<5	<100	<100	<100
	7/16/2001	147.61	8.10	ND	139.51	<5.0	<5.0	<5.0	<10	56	<5	<50	<50	<50
	1/22/2002	147.61	8.37	ND	139.24	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	5/7/2002	147.61	7.52	ND	140.09	<5.0	<5.0	<5.0	<10	199	<5.0	<50	<50	<50
	10/2/2002	147.61	9.42	ND	137.78	<2.0	<2.0	<2.0	<4.0	4.2	<3.0	<50	<50	<50
	5/10/2003	147.61	7.18	ND	140.02	<1.0	<1.0	<1.0	<1.0	799	NS	NS	NS	NS
	11/12/2003	147.61	7.92	ND	139.28	<2.0	<2.0	<2.0	<2.0	78.4	<3.0	<50	<50	<50
	5/18/2004	147.20	7.82	ND	139.38	<1.00	<3.0	<1.0	<6.0	250	<5.0	<100	<100	<100
	11/17/2004	147.20	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	6/20/2005	147.20	8.05	ND	139.15	<1.00	<3.0	<1.0	<6.0	321	<5.0	<100	<100	<100
	12/16/2005	147.20	7.41	ND	139.79	<1.00	<3.00	<1.00	<4.00	8.23	<5.00	<100	<100	<100
	6/27/2006	147.20	8.36	ND	138.84	<1.00	<3.00	<1.00	<4.00	23.3	<5.00	<100	<100	<100
	12/14/2006	147.20	8.02	ND	139.18	<1.00	<3.00	<1.00	<6.00	260	<5.00	<100	<100	<100
	7/11/2007	147.20	7.30	ND	139.90	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	1/8/2008	147.20	7.70	ND	139.50	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/20/2008	147.20	8.07	ND	139.13	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
1/14/2009	147.20	8.01	ND	139.19	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	
6/22/2009	147.20	7.57	ND	139.63	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	
12/23/2009	147.20	8.02	ND	139.18	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	
6/10/2010	147.20	8.10	ND	139.1	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	

95-214880 Global Companies LLC Mobil Station No. 1436 309 Lowell Street Andover, MA		Table 2 Concentrations of Volatile Petroleum Hydrocarbons (VPH) Detected in Groundwater												
Well No. (GW Class) <i>Screen Interval (ft.)</i>	Sampling Date	Top of Casing Elevation (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	Ground Water Elevation (ft)	Benzene (µg/l)	Toluene (µg/l)	Ethyl- benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)	Naph- thalene (µg/l)	C ₅ -C ₈ Aliphatics (µg/l)	C ₉ -C ₁₂ Aliphatics (µg/l)	C ₉ -C ₁₀ Aromatics (µg/l)
MCP Method 1 Standards			GW-1			5	1,000	700	10,000	70	140	300	700	200
			GW-2			2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000
			GW-3			10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000
OW-5 (GW-1,3) 1-10'	1/31/1997	144.43	4.84	ND	139.59	24	1.8	17	15.7	274	NA	NA	NA	NA
	4/3/1997	144.43	4.62	ND	139.81	<0.2	<0.2	<0.2	<0.4	<2.0	NA	NA	NA	NA
	7/21/1997	144.43	6.18	ND	138.25	6	<1.0	<1.0	<3	290	NA	NA	NA	NA
	10/22/1997	144.43	7.03	ND	138.25	70	5	10	<3	3,100	NA	NA	NA	NA
	5/4/1998	144.43	4.52	ND	139.91	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	7/30/1998	144.43	5.33	ND	139.10	46	20	36	37	1,300	NA	NA	NA	NA
	9/11/1998	144.43	6.16	ND	138.27	4	<1.0	<1.0	<3	190	NA	NA	NA	NA
	10/26/1998	144.43	5.38	ND	139.05	4	<1.0	<1.0	<3	54	NA	NA	NA	NA
	11/13/1998	144.43	5.48	ND	138.95	2	<1.0	<1.0	<3	29	NA	NA	NA	NA
	12/17/1998	144.43	5.76	ND	138.67	3	<1.0	<1.0	<3	52	NA	NA	NA	NA
	1/6/1999	144.43	5.23	ND	139.20	<1.0	<1.0	<1.0	<3	2	NA	NA	NA	NA
	2/9/1999	144.43	4.70	ND	139.73	<1.0	<1.0	<1.0	<3	2	NA	NA	NA	NA
	3/29/1999	144.43	4.50	ND	139.93	1	<1.0	<1.0	<3	9	NA	NA	NA	NA
	6/24/1999	144.43	5.65	ND	138.78	7	<5.0	<5.0	<15	86.8	<5.0	<100	<100	<100
	11/4/1999	144.43	4.96	ND	139.47	<1	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	1/3/2000	144.43	5.23	ND	139.20	<1	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	4/14/2000	144.43	4.89	ND	139.54	<1	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	1/22/2002	144.43	5.81	ND	138.62	<5.0	<5.0	<5.0	<10	72.8	<5.0	<50	<50	<50
	5/7/2002	144.43	4.66	ND	139.77	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	10/2/2002	143.66	6.39	ND	137.27	<2.0	<2.0	<2.0	<4.0	<2.0	<3.0	<50	<50	<50
	5/18/2004	143.66	5.05	ND	138.61	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	11/17/2004	143.66	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	6/20/2005	143.66	6.3	ND	137.36	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	12/15/2005	143.66	7.79	ND	135.87	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	6/27/2006	143.66	4.11	ND	139.55	<1.00	<3.00	3.83	<4.00	253	<5.00	<100	<100	534
	12/14/2006	143.66	5.12	ND	138.54	<1.00	<3.00	<1.00	<6.00	6.87	<5.00	<100	<100	<100
	7/10/2007	143.66	5.44	ND	138.22	<1.00	<3.00	14.6	4.12	12.1	<5.00	287	344	588
	10/17/2007	143.66	6.03	ND	137.63	5.06	3.85	10.2	7.20	18.8	<5.00	<100	127	57.9
	1/8/2008	143.66	4.76	ND	138.9	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	3/21/2008	143.66	4.01	ND	139.65	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/20/2008	143.66	5.17	ND	138.49	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	9/25/2008	143.66	5.20	ND	138.46	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	12/18/2008	143.66	4.30	ND	139.36	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	3/10/2009	143.66	4.13	ND	139.53	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/22/2009	143.66	4.48	ND	139.18	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	9/17/2009	143.66	5.04	ND	138.62	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	12/23/2009	143.66	4.95	ND	138.71	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	4/21/2010	143.66	4.83	ND	138.83	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/11/2010	143.66	5.21	ND	138.45	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
OW-6 (GW-1,3) 1-15'	4/3/1997	146.43	9.92	ND	136.51	16	ND	44	28.6	1,720	NA	NA	NA	NA
	7/21/1997	146.43	10.71	ND	135.72	340	370	63	250	11,000	NA	NA	NA	NA
	10/22/1997	146.43	11.38	ND	135.05	2,200	4,400	310	2,300	14,000	NA	NA	NA	NA
	5/4/1998	146.43	7.26	ND	139.17	22	2	73	<3	570	NA	NA	NA	NA
	9/11/1998	146.43	11.39	ND	135.04	31	<1.0	18	<3	2,600	NA	NA	NA	NA
	3/29/1999	146.43	7.25	ND	139.18	<1.0	<1.0	<1.0	<3	2	NA	NA	NA	NA
	6/24/1999	146.43	15.00	ND	131.43	<1.0	<5.0	<5.0	<15	6.6	<5.0	<100	<100	<100
	11/4/1999	146.43	7.60	ND	138.83	102	5.9	170	295.2	15,500	55.6	<2,000	<2,000	2,300
	1/3/2000	146.43	7.65	ND	138.78	290	<25	161	501	21,700	59	<500	1,090	3,500
	2/16/2000	146.43	9.07	ND	137.36	286	<25	194	659	12,700	52	<500	1,480	3,050
	2/25/2000	146.43	6.97	ND	139.46	270	8	190	650	11,000	NS	NS	NS	NS
	4/14/2000	146.43	NG	NG	NA	26.8	<5.0	<5.0	<15	2,210	<5.0	<100	<100	<100
	8/21/2000	146.43	9.41	ND	137.02	51.3	<5.0	33.4	<17.1	4,120	<5.0	<100	<100	150
	11/20/2000	146.43	9.00	ND	137.43	<5	<5.0	<5.0	<10	216	<5.0	<50	<50	<50
	2/26/2001	146.43	8.82	ND	137.61	5	<5.0	<5	<15	156	<5.0	<100	<100	<100
	7/16/2001	146.43	9.72	ND	136.71	17.7	<10	36.2	<20	6,370	11.1	<100	151	272
	1/22/2002	146.43	9.91	ND	136.52	<5.0	<5.0	<5.0	<10	13.7	<5.0	<50	<50	<50
	5/7/2002	146.43	8.74	ND	137.69	74	34.3	116	191	1,380	24	<50	274	841
	5/10/2003	147.09	5.53	ND	141.56	<2.0	<2.0	<2.0	<4.0	28.2	<3.0	<50	<50	<50
	11/12/2003	147.09	NG	NG	NA	<2.0	<2.0	<2.0	<4.0	3.8	<3.0	<50	<50	<50
	5/18/2004	147.09	9.05	ND	138.04	<1.00	<3.0	<1.0	<6.0	15.4	<5.0	<100	<100	<100
	11/19/2004	147.09	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	6/2/2005	147.09	8.92	ND	138.17	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	12/16/2005	147.09	7.68	ND	139.41	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	6/27/2006	147.09	7.81	ND	139.28	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	12/13/2006	147.09	8.72	ND	138.37	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	7/10/2007	147.09	9.08	ND	138.01	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	10/17/2007	147.09	10.59	ND	136.5	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	1/8/2008	147.09	8.41	ND	138.68	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	3/21/2008	147.09	7.86	ND	139.23	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/20/2008	147.09	8.87	ND	137.56	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	9/25/2008	147.09	8.98	ND	137.45	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	12/18/2008	147.09	8.04	ND	138.39	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	3/10/2009	147.09	7.94	ND	138.49	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/22/2009	147.09	8.3	ND	138.13	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100

95-214880 Global Companies LLC Mobil Station No. 1436 309 Lowell Street Andover, MA		Table 2 Concentrations of Volatile Petroleum Hydrocarbons (VPH) Detected in Groundwater												
Well No. (GW Class) Screen Interval (ft.)	Sampling Date	Top of Casing Elevation (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	Ground Water Elevation (ft)	Benzene (µg/l)	Toluene (µg/l)	Ethyl- benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)	Naph- thalene (µg/l)	C ₅ -C ₈ Aliphatics (µg/l)	C ₉ -C ₁₂ Aliphatics (µg/l)	C ₉ -C ₁₀ Aromatics (µg/l)
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000
OW-7 (GW-1,3) 1-15'	5/20/1998	145.82	5.49	ND	140.33	<1	<1	<1	<3	<1	NA	NA	NA	NA
	10/26/1998	145.82	7.69	ND	138.13	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	11/13/1998	145.82	7.65	ND	138.17	<1.0	<1.0	<1.0	<3	7	NA	NA	NA	NA
	12/17/1998	145.82	7.92	ND	137.90	<1.0	<1.0	<1.0	<3	2	NA	NA	NA	NA
	1/6/1999	145.82	7.35	ND	138.47	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	2/9/1999	145.82	7.05	ND	138.77	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	3/29/1999	145.82	6.88	ND	138.94	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	6/24/1999	145.82	8.67	ND	137.15	<1.0	<5.0	<5.0	<15	9.3	<5.0	<100	<100	<100
	2/16/2000	145.82	7.15	ND	138.67	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	11/20/2000	145.82	7.45	ND	138.37	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	1/22/2002	145.82	8.10	ND	137.72	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	5/7/2002	145.82	7.17	ND	138.65	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
10/2/2002	145.42	8.32	ND	137.10	<2.0	<2.0	<2.0	<4.0	2.5	<3.0	<50	<50	<50	
OW-8 (GW-1,3) 2-15'	5/20/1998	146.28	7.69	ND	138.59	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	7/30/1998	146.28	8.18	ND	138.10	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	9/11/1998	146.28	8.75	ND	137.53	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	10/26/1998	146.28	8.09	ND	138.19	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	11/13/1998	146.28	8.07	ND	138.21	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	12/17/1998	146.28	8.33	ND	137.95	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	1/6/1999	146.28	7.75	ND	138.53	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	2/9/1999	146.28	7.48	ND	138.80	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	3/29/1999	146.28	7.23	ND	139.05	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	6/24/1999	146.28	8.46	ND	137.82	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	11/20/2000	146.28	7.81	ND	138.47	<5.0	<5.0	<5.0	10	<5.0	<5.0	<50	<50	<50
	1/22/2002	146.28	8.43	ND	137.85	<5.0	<5.0	<5.0	10	<5.0	<5.0	<50	<50	<50
OW-9 (GW-1,3) 1-15'	7/30/1998	147.49	8.60	ND	138.89	<1.0	<1.0	<1.0	<3	24	NA	NA	NA	NA
	9/11/1998	147.49	9.23	ND	138.26	<1.0	<1.0	<1.0	<3	6	NA	NA	NA	NA
	10/26/1998	147.49	8.60	ND	138.89	<1.0	<1.0	<1.0	<3	3	NA	NA	NA	NA
	11/13/1998	147.49	8.64	ND	138.85	<1.0	<1.0	<1.0	<3	2	NA	NA	NA	NA
	12/17/1998	147.49	8.94	ND	138.55	<1.0	<1.0	<1.0	<3	4	NA	NA	NA	NA
	1/6/1999	147.49	8.27	ND	139.22	<1.0	<1.0	<1.0	<3	2	NA	NA	NA	NA
	2/9/1999	147.49	7.88	ND	139.61	<1.0	<1.0	<1.0	<3	18	NA	NA	NA	NA
	3/29/1999	147.49	7.79	ND	139.70	<1.0	<1.0	<1.0	<3	1	NA	NA	NA	NA
	6/24/1999	147.49	9.09	ND	138.40	2.6	<5	<5	61.5	27.3	8.4	<100	<100	<100
	11/4/1999	147.49	8.18	ND	139.31	8.6	97.3	39.3	191.4	1,830	6.2	<100	100	180
	1/3/2000	147.49	8.44	ND	139.05	<1.0	<5.0	<5.0	<15	592	<5.0	<100	<100	<100
	4/14/2000	147.49	NG	NG	NA	18.6	20	30.6	101.6	670	<5.0	<100	220	290
	8/21/2000	147.49	9.53	ND	137.96	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	11/20/2000	147.49	8.95	ND	138.54	<5.0	<5.0	<5.0	<10	726	<5.0	<50	<50	<50
	2/26/2001	147.49	8.72	ND	138.77	14.8	<5.0	18.2	<15	393	<5.0	<100	<100	<100
	1/22/2002	147.49	10.18	ND	137.31	<5.0	<5.0	<5.0	<10	10.8	<5.0	<50	<50	<50
	11/12/2003	147.40	9.45	ND	137.95	<2.0	<2.0	<2.0	<2.0	6.1	<3.0	<50	<50	<50
	5/18/2004	147.40	9.10	ND	138.30	<1.00	<3.0	1.1	<6.0	29.4	<5.0	<100	<100	<100
	11/19/2004	147.40	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	6/2/2005	147.40	8.07	ND	139.33	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	12/16/2005	147.40	8.07	ND	139.33	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	6/27/2006	147.40	9.05	ND	138.35	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	7/10/2007	147.40	9.25	ND	138.15	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	1/8/2008	147.40	8.39	ND	139.01	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/20/2008	147.40	9.03	ND	138.37	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	12/18/2008	147.40	8.15	ND	139.25	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
6/22/2009	147.40	8.41	ND	138.99	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	
12/23/2009	147.40	8.53	ND	138.87	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	
6/11/2010	147.40	9.24	ND	138.16	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	

95-214880 Global Companies LLC Mobil Station No. 1436 309 Lowell Street Andover, MA		Table 2 Concentrations of Volatile Petroleum Hydrocarbons (VPH) Detected in Groundwater													
Well No. (GW Class) Screen Interval (ft.)	Sampling Date	Top of Casing Elevation (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	Ground Water Elevation (ft)	Benzene (µg/l)	Toluene (µg/l)	Ethyl- benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)	Naph- thalene (µg/l)	C ₃ -C ₈ Aliphatics (µg/l)	C ₉ -C ₁₂ Aliphatics (µg/l)	C ₉ -C ₁₀ Aromatics (µg/l)	
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200	
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000	
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000	
OW-10 (GW-1,3) Total depth = 17.5'	4/3/1997	146.59	6.44	ND	140.15	19	2.2	20	21	72	NA	NA	NA	NA	
	7/21/1997	146.59	8.64	ND	137.95	34	5	46	8	340	NA	NA	NA	NA	
	10/22/1997	146.59	9.58	ND	137.01	230	420	240	890	12,000	NA	NA	NA	NA	
	5/4/1998	146.59	7.09	ND	139.50	21	<1	35	3	570	NA	NA	NA	NA	
	7/30/1998	146.59	7.85	ND	138.74	60	90	90	380	1,500	NA	NA	NA	NA	
	9/11/1998	146.59	9.70	ND	136.89	40	7	50	95	640	NA	NA	NA	NA	
	10/26/1998	146.59	7.87	ND	138.72	120	39	98	240	880	NA	NA	NA	NA	
	11/13/1998	146.59	8.01	ND	138.58	74	19	73	200	630	NA	NA	NA	NA	
	12/17/1998	146.59	8.28	ND	138.31	55	6	51	99	390	NA	NA	NA	NA	
	1/6/1999	146.59	7.68	ND	138.91	100	<20	110	170	840	NA	NA	NA	NA	
	2/9/1999	146.59	7.15	ND	139.44	28	3	22	25	470	NA	NA	NA	NA	
	3/29/1999	146.59	6.96	ND	139.63	61	89	57	90	630	NA	NA	NA	NA	
	6/24/1999	146.59	8.13	ND	138.46	122	59	133	389	938	<25	<500	<500	<500	
	11/4/1999	146.59	7.52	ND	139.07	23.3	<5.0	18.5	<15	155	<5.0	<100	<100	110	
	1/3/2000	146.59	7.76	ND	138.83	39	<5.0	25.6	<15	204	<5.0	<100	<100	110	
	2/16/2000	146.59	7.32	ND	139.27	7.5	<5.0	<5.0	<15	67.9	<5.0	<100	<100	<100	
	4/14/2000	146.59	7.39	ND	139.20	41.7	57.6	35.4	76.2	266	<5.0	<100	<100	110	
	8/21/2000	146.59	8.05	ND	138.54	107	614	171	671	2,610	<25	<500	590	840	
	11/20/2000	146.59	7.51	ND	139.08	194	1,410	320	2,010	14,900	83.8	<50	1,420	1,580	
	2/26/2001	146.59	7.33	ND	139.26	16	<5.0	21.5	39.9	556	6.3	<100	<100	<100	
	7/16/2001	146.59	8.16	ND	138.43	<50	<5.0	<5.0	<100	749	<5.0	<500	<500	<500	
	10/2/2002	146.31	8.92	ND	137.39	<2.0	<2.0	<2.0	<4.0	110	<3.0	<50	<50	<50	
	11/13/2003	146.31	7.71	ND	138.60	<2.0	<2.0	<2.0	<4.0	26.7	<3.0	<50	<50	<50	
	5/18/2004	146.31	7.55	ND	138.76	<14.3	<3.0	2.1	6.2	336	<5.0	<100	<100	<100	
	11/17/2004	146.31	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	193	<5.0	<100	<100	<100	
	6/2/2005	146.31	7.55	ND	138.76	6.4	3.2	3.8	10.5	216	<5.0	<100	<100	<100	
	12/15/2005	146.31	7.30	ND	139.01	<1.00	<3.00	3.91	<4.00	57.7	<5.00	<100	<100	<100	65.9
	6/27/2006	146.31	6.50	ND	139.81	<1.00	<3.00	<1.00	<4.00	14.2	<5.00	<100	<100	<100	<100
	12/14/2006	146.31	7.65	ND	138.66	<1.00	<3.00	6.13	30.4	48.7	<5.00	<100	140	276	
	7/10/2007	146.31	7.89	ND	138.42	3.74	<3.00	22.1	14.78	11.4	<5.00	186	257	415	
	10/17/2007	146.31	8.58	ND	137.73	25.4	5.84	120	16.48	20.5	<5.00	865	621	343	
	1/8/2008	146.31	7.24	ND	139.07	1.36	13.5	8.85	68.8	8.97	<5.00	<100	<100	<100	227
	3/21/2008	146.31	6.43	ND	139.88	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	<100
	6/20/2008	146.31	7.67	ND	138.64	2.37	<3.00	7.88	10.59	<3.00	<5.00	<100	<100	<100	<100
	9/25/2008	146.31	7.70	ND	138.61	10.3	<3.00	28.0	17.57	4.17	<5.00	147	<100	<100	132
	12/18/2008	146.31	6.80	ND	139.51	<1.00	<3.00	4.16	23.44	<3.00	<5.00	<100	<100	<100	<100
	3/10/2009	146.31	6.61	ND	139.70	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	<100
	6/22/2009	146.31	7.00	ND	139.31	1.88	<3.00	10.2	2.82	<3.00	<5.00	<100	<100	<100	59.4
	9/17/2009	146.31	7.40	ND	138.91	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	<100
	12/23/2009	146.31	7.35	ND	138.96	<1.00	<3.00	2.55	9.37	<3.00	<5.00	<100	<100	<100	87.9
	4/21/2010	146.31	7.16	ND	139.15	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	<100
	6/11/2010	146.31	7.81	ND	138.50	5.20	<3.00	29.0	<6.00	<3.00	<5.00	122	<100	<100	114
	6/28/2011	146.31	7.25	ND	139.06	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<75.0	<25.0	<25.0	<25.0
	3/8/2012	146.31	7.21	ND	139.10	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<75.0	<25.0	<25.0	<25.0
	6/20/2012	146.31	7.81	ND	138.50	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75.0	<25.0	<25.0	<25.0
9/10/2012	146.31	6.60	ND	139.71	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75.0	<25.0	<25.0	<25.0	
12/12/2012	146.31	8.90	ND	137.41	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75.0	<25.0	<25.0	<25.0	
6/19/2013	146.31	7.05	ND	139.26	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75.0	<25.0	<25.0	<25.0	
12/16/2013	146.31	8.11	ND	138.20	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75.0	<25.0	<25.0	<25.0	
3/31/2015	146.31	6.64	ND	139.67	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100	<100	
OW-11 (GW-1,3) 5'-20'	11/20/2000	145.88	9.67	ND	136.21	14.6	<5.0	<5.0	<10	4,320	<5.0	<50	<50	88.2	
	5/18/2004	147.24	8.48	ND	138.76	<1.0	<3.0	<1.0	<6.0	14.1	<5.0	<100	<100	<100	
	12/14/2006	147.24	3.53	ND	143.71	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	
	DESTROYED														
OW-12 (GW-1,3) 5'-18"	10/2/2002	147.64	10.13	ND	137.51	34.9	<2.0	120	50.1	3,420	34.6	<50	276	987	
	11/13/2003	147.64	8.95	ND	138.69	2.8	4.8	147	458	167	26.9	<50	<50	754	
	6/20/2005	147.64	8.66	ND	138.98	1.20	82.3	493	1,229	290	138	646	<1,000	3,460	
	12/16/2005	147.64	7.98	ND	139.66	<1.00	<3.00	2.73	<4.00	<3.00	<5.00	<100	<100	82.6	
	6/27/2006	147.64	7.7	ND	139.94	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100	
	12/14/2006	147.64	8.75	ND	138.89	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	131	<100	
	7/11/2007	147.64	9.24	ND	138.40	<1.00	<3.00	12.3	<6.00	<3.00	<5.00	<100	117	127	
	1/8/2008	147.64	8.53	ND	139.11	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	248	
	6/20/2008	147.64	8.92	ND	138.72	1.23	<3.00	52.9	4.33	3.18	<5.00	286	593	910	
	6/22/2009	147.64	8.25	ND	139.39	<1.00	<3.00	2.89	<6.00	<3.00	6.83	444	1,060	1,750	
	12/23/2009	147.64	8.51	ND	139.13	1.42	<3.00	3.49	<6.00	<3.00	8.13	588	<0.5	1,600	
	6/10/2010	147.64	9.12	ND	138.52	5.02	3.24	11.6	6.94	<3.00	6.20	603	<0.5	1,330	
	9/30/2010	147.64	10.22	ND	137.42	15.6	<10.0	<10.0	<30.0	<10	32.3	304	884	400	
	12/29/2010	147.64	8.93	ND	138.71	<5.00	<5.00	<5.00	<15.00	<5.00	<5.00	<75	<25	<25	
	3/31/2011	147.64	8.02	ND	139.62	<5.00	<5.00	<5.00	<5.00	<5.00	17.7	179	459	244	
	6/28/2011	147.64	8.25	ND	139.39	<5.0	<5.0	<5.0	<10.0	<5.0	13.1	136	328	158	
	9/28/2011	147.64	8.80	ND	138.84	<5.0	<5.0	<5.0	<10.0	<5.0	15.2	163	291	142	

95-214880 Global Companies LLC Mobil Station No. 1436 309 Lowell Street Andover, MA		Table 2 Concentrations of Volatile Petroleum Hydrocarbons (VPH) Detected in Groundwater												
Well No. (GW Class) Screen Interval (ft.)	Sampling Date	Top of Casing Elevation (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	Ground Water Elevation (ft)	Benzene (µg/l)	Toluene (µg/l)	Ethyl- benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)	Naph- thalene (µg/l)	C ₅ -C ₈ Aliphatics (µg/l)	C ₉ -C ₁₂ Aliphatics (µg/l)	C ₉ -C ₁₀ Aromatics (µg/l)
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000
OW-13 (GW-1,3) 5-20'	10/2/2002	147.67	10.02	ND	137.65	2.7	5.6	58.4	85.6	7.3	14.2	<50	<50	206
	6/20/2005	147.67	8.40	ND	139.27	<1.00	57.5	688	3,933	1,130	286	933 J	<2,500	6,840
	12/16/2005	147.67	7.65	ND	140.02	<1.00	<3.00	64.0	572	<3.00	27.0	166	1230	998
	6/27/2006	147.67	8.51	ND	139.16	<1.00	<3.00	58.6	82.9	3.77	15.8	<100	590	518
	12/14/2006	147.67	8.64	ND	139.03	<1.00	<3.00	157	258.9	<3.00	104	559	2,000	3,970
	7/11/2007	147.67	9.18	ND	138.49	<1.00	3.95	205	844	<3.00	125	467	4,480	4,570
	10/17/2007	147.67	9.69	ND	137.98	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	1/8/2008	147.67	9.37	ND	138.30	<1.00	6.05	305	980	<3.00	147	761	<100	8,460
	3/21/2008	147.67	7.45	ND	140.22	<1.00	3.35	213	647	<3.00	84.7	560	780	3,020
	3/21/2008 (Dup)	147.67	7.45	ND	140.22	<1.00	3.16	201	603	<3.00	77.4	496	876	3,090
	6/20/2008	147.67	8.75	ND	138.92	2.07	3.51	2.82	892	4.62	93.1	421	2,540	4,370
	9/25/2008	147.67	8.84	ND	138.83	3.10	<3.00	223	704	<3.00	89.6	469	<500	4,160
	12/23/2008	147.67	8.17	ND	139.50	<1.00	<3.00	271	1,107	<3.00	116	673	682	6,340
	3/10/2009	147.67	7.65	ND	140.02	1.36	<3.00	50.8	191.9	<3.00	26.3	310	657	1,380
	6/22/2009	147.67	7.94	ND	139.73	<1.00	<3.00	207	646	7.64	89.2	866	2,780	5,160
	9/17/2009	147.67	NG	ND	NA	<1.00	<3.00	5.82	17.47	<3.00	5.47	<100	<100	136
	12/23/2009	147.67	8.30	ND	139.37	2.13	<3.00	161	550	4.94	75.9	1,040	1,580	5,260
	4/21/2010	147.67	8.19	ND	139.48	<1.00	<3.00	41.4	92.8	<3.00	16.0	198	<500	947
	6/10/2010	147.67	8.80	ND	138.87	1.60	<3.00	118	300.4	<3.00	47.1	622	712	2,360
	9/30/2010	147.67	10.15	ND	137.52	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75	26	<25
	12/29/2010	147.67	9.76	ND	137.91	<5.00	<5.00	48	104.0	<5.00	22.0	164	839	458
	3/31/2011	147.67	7.85	ND	139.82	<5.00	<5.00	99	303.5	<5.00	28.4	290	1,510	896
	6/28/2011	147.67	8.11	ND	139.56	<5.0	<5.0	29.8	51.1	<5.0	20.6	305	1,140	594
	9/28/2011	147.67	8.66	ND	139.01	<5.0	<5.0	83.8	180.1	<5.0	45.7	341	2,010	1310
	12/22/2011	147.67	8.18	ND	139.49	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75	<25	<25
	3/8/2012	147.67	8.32	ND	139.35	<5.0	<5.0	76.7	217.3	<5.0	28.5	220	1,210	982
	6/20/2012	147.67	8.89	ND	138.78	<5.0	<5.0	69.3	151.8	<5.0	44.5	383	764	1,780
	9/10/2012	147.67	9.42	ND	138.25	<5.0	<5.0	22.6	55.3	<5.0	15.2	139	529	649
	12/12/2012	147.67	9.02	ND	138.65	<5.0	<5.0	60.8	110.7	<5.0	29.8	181	916	1,320
	3/27/2013	147.67	7.85	ND	139.82	<5.0	<5.0	65.5	193.4	<5.0	22.8	187	608	892
	6/19/2013	147.67	8.02	ND	139.65	<5.0	<5.0	5.9	<10.0	<5.0	8.3	80.3	201	247
	12/16/2013	147.67	9.28	ND	138.39	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75	<25	<25
	3/26/2014	147.67	8.16	ND	139.51	<5.0	<5.0	25.7	46.3	<5.0	13.5	154	328	505
	6/30/2014	147.67	10.42	ND	137.25	2.4	<2.0	23	42.0	<2.0	10	<200	<200	650
	9/11/2014	147.67	9.52	ND	138.15	<1.0	<1.0	5.7	8.0	<1.0	<5.0	<100	290	220
12/8/2014	147.67	7.79	ND	139.88	<1.0	<1.0	12	18.9	<1.0	13	120	<100	460	
3/31/2015	147.67	7.60	ND	140.07	<1.0	<1.0	51	157	<1.0	15	320	<100	950	
9/17/2015	147.67	9.50	ND	138.17	<1.0	<1.0	2.8	4.9	<1.0	<5.0	<100	<100	130	
12/16/2015	147.67	9.15	ND	138.52	<1.0	<1.0	6.6	15.5	<1.0	<5.0	<100	<100	340	
3/8/2016	147.67	8.55	ND	139.12	<1.0	<1.0	15	23.4	<1.0	6.8	230	<100	670	
6/7/2016	147.67	8.86	ND	138.81	<1.0	<1.0	14	24.9	<1.0	6.1	250	<100	820	
OW-14 (GW-1,3)	11/19/2004	148.01	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	6/2/2005	148.01	9.29	ND	138.72	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	12/16/2005	148.01	8.80	ND	139.21	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	6/27/2006	148.01	8.61	ND	139.40	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	7/10/2007	148.01	9.91	ND	138.10	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	10/17/2007	148.01	10.47	ND	137.54	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	1/8/2008	148.01	9.28	ND	138.73	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	3/21/2008	148.01	8.46	ND	139.55	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/20/2008	148.01	9.70	ND	138.31	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	9/25/2008	148.01	9.80	ND	138.21	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	12/18/2008	148.01	8.83	ND	139.18	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	3/10/2009	148.01	8.71	ND	139.30	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
MW-1 (GW-1,3) 5-15'	7/30/1998	147.59	7.11	ND	140.48	<1.0	<1.0	<1.0	<3	3	NA	NA	NA	NA
	9/11/1998	147.59	8.01	ND	139.58	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	10/26/1998	147.59	7.68	ND	139.91	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	11/13/1998	147.59	7.88	ND	139.71	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	12/17/1998	147.59	7.72	ND	139.87	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	1/6/1999	147.59	7.65	ND	139.94	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA
	2/9/1999	147.59	6.35	ND	141.24	<1.0	<1.0	<1.0	<3	23	NA	NA	NA	NA
	3/29/1999	147.59	5.65	ND	141.94	<1.0	<1.0	<1.0	<3	50	NA	NA	NA	NA
	6/24/1999	147.59	7.08	ND	140.51	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	1/22/2002	147.59	8.93	ND	138.66	<5.0	<5.0	<5.0	<10	24.3	<5.0	<50	<50	<50
	5/10/2003	147.21	6.33	ND	140.88	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS
	11/13/2003	147.21	7.67	ND	138.54	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS
6/28/2011	147.21	6.80	ND	140.41	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<75.0	<25.0	<25.0	
3/26/2014	147.21	6.60	ND	140.61	<5.0	<5.0	<5.0	<10.0	<5.0	6.78	<75.0	<25.0	<25.0	
6/30/2014	147.21	7.61	ND	139.60	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<100	<100	<100	
9/11/2014	147.21	7.97	ND	139.24	1.8	<1.0	<1.0	<2.0	<1.0	<5.0	<100	<100	<100	
12/8/2014	147.21	6.19	ND	141.02	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100	
9/17/2015	147.21	8.00	ND	139.21	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100	
12/16/2015	147.21	7.90	ND	139.31	<1.0	<1.0	<1.0	<3.0	<1.0	15	<100	<100	<100	
3/8/2016	147.21	6.98	ND	140.23	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100	
6/7/2016	147.21	7.50	ND	139.71	<1.0	<1.0	<1.0	<3.0	<1.0					

95-214880 Global Companies LLC Mobil Station No. 1436 309 Lowell Street Andover, MA			Table 2 Concentrations of Volatile Petroleum Hydrocarbons (VPH) Detected in Groundwater												
Well No. (GW Class) Screen Interval (ft.)	Sampling Date	Top of Casing Elevation (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	Ground Water Elevation (ft)	Benzene (µg/l)	Toluene (µg/l)	Ethyl- benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)	Naph- thalene (µg/l)	C ₅ -C ₈ Aliphatics (µg/l)	C ₉ -C ₁₂ Aliphatics (µg/l)	C ₉ -C ₁₀ Aromatics (µg/l)	
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200	
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000	
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000	
MW-2 (GW-1,2,3) 5-15'	4/3/1997	147.95	6.86	ND	141.09	821	3,790	381	2,484	19,300	NA	NA	NA	NA	
	7/21/1997	147.95	8.91	ND	139.04	1,100	4,400	480	3,600	100,000	NA	NA	NA	NA	
	10/22/1997	147.95	10.08	ND	137.87	2,600	4,900	810	5,900	190,000	NA	NA	NA	NA	
	5/4/1998	147.95	7.58	ND	140.37	1,400	8,500	900	6,900	14,000	NA	NA	NA	NA	
	5/20/1998	147.95	NG	NG	NA	880	3,300	320	2,600	80,000	NA	NA	NA	NA	
	7/30/1998	147.95	7.97	ND	139.98	890	4,700	600	4,600	2,500	NA	NA	NA	NA	
	9/11/1998	147.95	8.65	ND	139.30	460	4,200	550	4,000	1,800	NA	NA	NA	NA	
	10/26/1998	147.95	8.37	ND	139.58	210	1,800	250	2,000	5,500	NA	NA	NA	NA	
	11/13/1998	147.95	8.54	ND	139.41	<500	1,700	280	2,200	5,100	NA	NA	NA	NA	
	12/17/1998	147.95	8.69	ND	139.26	510	3,200	540	3,900	16,000	NA	NA	NA	NA	
	1/6/1999	147.95	8.24	ND	139.71	<2,000	3,300	400	3,400	34,000	NA	NA	NA	NA	
	2/9/1999	147.95	6.90	ND	141.05	1,500	8,900	800	5,800	15,000	NA	NA	NA	NA	
	3/29/1999	147.95	6.72	ND	141.23	640	3,500	640	4,500	4,400	NA	NA	NA	NA	
	6/24/1999	147.95	8.25	ND	139.70	513	5,890	1,110	7,160	10,300	280	4,000	6,100	9,000	
	11/4/1999	147.95	7.48	ND	140.47	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100	
	1/3/2000	147.95	8.37	ND	139.58	1,580	6,430	890	5,220	60,100	240	<2500	5400	11300	
	2/16/2000	147.95	7.83	ND	140.12	1,630	8,130	1,030	6,090	35,900	220	<2500	7700	10200	
	2/25/2000	147.95	7.54	ND	140.41	1,100	6,600	660	4,400	27,000	NS	NS	NS	NS	
	4/14/2000	147.95	7.40	ND	140.55	1,500	11,600	1,320	7,980	22,000	310	<5,000	8,800	9,400	
	8/21/2000	147.95	8.35	ND	139.60	1,330	8,860	1,300	8,240	29,000	340	<5,000	6,800	11,800	
	11/20/2000	147.95	7.60	ND	140.35	2,410	13,800	2,230	14,970	40,700	646	<5,000	8,130	21,400	
	2/26/2001	147.95	7.67	ND	140.28	658	5,220	1,010	6,390	11,000	251	2,000	9,000	7,900	
	7/16/2001	147.95	7.73	ND	140.22	2,910	11,900	1,480	9,500	61,500	439	<2,500	11,200	14,200	
	1/22/2002	147.95	8.70	ND	139.25	1,830	13,300	2,550	18,820	22,900	1,420	10,600	17,500	55,600	
	5/7/2002	147.95	7.66	ND	140.29	588	9,840	1,700	12,260	6,620	454	7,550	7,800	16,600	
	10/2/2002	147.55	9.43	ND	138.12	205	2,360	900	5,780	6,850	288	1,390	2,300	7,820	
	5/10/2003	147.55	7.20	ND	140.35	51.6	3,440	825	8,110	1,140	511	7,350	<50	11,000	
	11/13/2003	147.55	8.29	ND	139.26	19.5	697	404	2,359	2,910	309	456	667	9,750	
	5/18/2004	147.55	7.95	ND	139.60	1.6	549	490	2,894	159	186	1,990	3,360	7,550	
	11/18/2004	147.55	NG	NG	NA	1.4	408	324	2,868	98.4	144	2,260	3,860	4,650	
	6/20/2005	147.55	7.96	ND	139.59	<1.00	95.4	381	2,369	231	131	2,430	<1,000	4,110	
	12/16/2005	147.55	7.48	ND	140.07	<1.00	24.7	85.9	454	63.7	33.9	703	<500	1,710	
	6/27/2006	147.55	6.82	ND	140.73	<1.00	<3.00	10.7	32.97	58.3	5.74	110	<100	277	
	12/14/2006	147.55	8.02	ND	139.53	2.66	6.94	88.8	257.5	<3.00	33.0	1,210	674	2,020	
	7/11/2007	147.55	8.42	ND	139.13	<1.00	5.00	79.1	257.9	<3.00	39.5	1,400	2,630	3,010	
	10/17/2007	147.55	9.06	ND	138.49	<1.00	4.96	48.8	112.1	<3.00	20.9	768	1,530	1,120	
	1/8/2008	147.55	7.76	ND	139.79	<1.00	6.09	93.6	387.6	<3.00	50.9	1,180	<500	2,910	
	3/21/2008	147.55	6.85	ND	140.70	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	
	6/20/2008	147.55	8.19	ND	139.36	<1.00	6.52	86.0	243.9	11.5	46.8	1,350	1,220	2,690	
	9/25/2008	147.55	8.18	ND	139.37	5.90	<3.00	52.0	112.8	<3.00	30.3	786	<500	1,900	
	25-Sep-08 Dup	147.55	8.18	ND	139.37	5.94	<3.00	50.7	114.6	<3.00	28.1	803	<500	1,780	
	12/23/2008	147.55	7.50	ND	140.05	1.84	3.71	56.1	218.2	3.74	36.4	1,060	566	2,950	
	3/10/2009	147.55	7.01	ND	140.54	1.89	<3.00	23.3	66.7	<3.00	14.9	597	750	1,290	
	3/10/2009 Dup	147.55	7.01	ND	140.54	1.96	<3.00	23.3	66.5	<3.00	14.9	609	700	1,220	
	6/22/2009	147.55	7.32	ND	140.23	4.96	3.46	35.6	118.2	6.32	29	1,040	1,520	2,140	
9/17/2009	147.55	7.80	ND	139.75	1.69	<3.00	16.4	44.7	3.52	12.5	418	<500	761		
9/17/2009 Dup	147.55	7.80	ND	139.75	1.54	<3.00	16.2	44.6	3.42	13.5	431	<500	670		
12/23/2009	147.55	7.70	ND	139.85	2.06	<3.00	20.2	83.3	<3.00	16.7	778	<500	1,940		
4/21/2010	147.55	8.51	ND	139.04	1.63	<3.00	9.32	7.54	<3.00	5.68	323	174	569		
4/21/2010 Dup	147.55	8.51	ND	139.04	1.52	<3.00	9.84	7.93	<3.00	5.92	341	235	566		
6/10/2010	147.55	8.25	ND	139.30	2.93	<3.00	19.5	53.3	4.14	16.9	1,350	757	1,800		
9/30/2010	147.55	9.55	ND	138.00	<10.0	<10.0	17.0	69.4	<10.0	24.1	481	1,200	600		
12/29/2010	147.55	8.02	ND	139.53	<5.00	<5.00	5.0	<15.00	<5.00	5.0	163	264	129		
3/31/2011	147.55	7.22	ND	140.33	<5.00	<5.00	5.0	<15.00	<5.00	5.0	<75	59.4	25.3		
6/28/2011	147.55	7.53	ND	140.02	<5.0	26.6	14.6	38.1	<5.0	7.3	307	442	219		
9/28/2011	147.55	7.97	ND	139.58	<5.0	<5.0	20.4	67.1	<5.0	15.0	313	709	431		
12/22/2011	147.55	7.77	ND	139.78	<5.0	<5.0	10.2	22.6	<5.0	8.9	356	534	263		
3/8/2012	147.55	7.66	ND	139.89	<5.0	<5.0	5.0	<15.0	<5	5.2	121	205	174		
6/20/2012	147.55	8.24	ND	139.31	<5.0	<5.0	15.5	36.6	<5.0	20.3	542	390	916		
9/10/2012	147.55	8.67	ND	138.88	<5.0	<5.0	24.3	57.7	<5.0	27.2	447	1,100	1,350		
12/12/2012	147.55	8.49	ND	139.06	<5.0	<5.0	6.6	<15.0	<5.0	8.0	347	167	406		
3/27/2013	147.55	13.16	ND	134.39	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75	30.4	27.2		
6/19/2013	147.55	7.35	ND	140.20	<5.0	<5.0	8.1	18.8	<5.0	10.3	215	103	336		
12/16/2013	147.55	8.63	ND	138.92	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75	34.8	36.4		
3/26/2014	147.55	7.43	ND	140.12	<5.0	<5.0	7.04	<15.0	<5.0	5.81	124	142	200		
Destroyed April 2014															
MW-2R (GW-1,2,3)	6/30/2014	NM	8.96	ND	NM	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<100	<100	<100	
	9/11/2014	NM	9.22	ND	NM	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<100	<100	<100	
	12/8/2014	NM	7.66	ND	NM	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100	
	3/31/2015	NM	7.40	ND	NM	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100	
	9/17/2015	NM	9.25	ND	NM	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100	
	12/16/2015	NM	9.05	ND	NM	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100	
	3/8/2016	NM	8.44	ND	NM	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100	
	6/7/2016	NM	8.75	ND	NM	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100	

95-214880 Global Companies LLC Mobil Station No. 1436 309 Lowell Street Andover, MA		Table 2 Concentrations of Volatile Petroleum Hydrocarbons (VPH) Detected in Groundwater												
Well No. (GW Class) Screen Interval (ft.)	Sampling Date	Top of Casing Elevation (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	Ground Water Elevation (ft)	Benzene (µg/l)	Toluene (µg/l)	Ethyl- benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)	Naph- thalene (µg/l)	C ₅ -C ₈ Aliphatics (µg/l)	C ₉ -C ₁₂ Aliphatics (µg/l)	C ₉ -C ₁₀ Aromatics (µg/l)
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000
MW-2D (GW-1,3) 25-35'	11/20/2000	148.24	7.95	ND	140.29	18.3	245	407	2,830	697	193	1,450	3,170	4,250
	2/26/2001	148.24	8.04	ND	140.20	<1.0	<5.0	9	34.7	8.2	9.1	380	220	220
	7/16/2001	148.24	9.11	ND	139.13	<5.0	<5.0	<5.0	7.3	52.4	6.7	62.4	<50	68.3
	1/22/2002	148.24	8.98	ND	139.26	<5.0	<5.0	<5.0	9.5	<5.0	<5.0	189	<50	113
	5/7/2002	148.24	8.05	ND	140.19	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	10/2/2002	147.84	9.59	ND	138.25	<2.0	<2.0	<2.0	12.8	67	<3.0	<50	<50	<50
	11/18/2002	147.84	7.71	ND	140.13	<2.0	<2.0	2.1	4.9	<2.0	<3.0	139	<50	143
	5/10/2003	147.84	7.51	ND	140.33	<2.0	<2.0	<2.0	2	<2.0	<3.0	<50	<50	<50
	11/13/2003	147.84	8.66	ND	138.88	<2.0	<2.0	<2.0	<4.0	4.7	<3.0	<50	<50	<50
	5/18/2004	147.84	8.32	ND	139.52	<1.00	<3.0	<1.0	<6.0	3.3	<5.0	<100	<100	<100
11/18/2004	147.84	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100	
MW-3 (GW-1,2,3) 5-15'	1/31/1997	148.02	8.38	ND	139.64	122	59	93	770	960	NA	NA	NA	NA
	10/22/1997	148.02	10.60	ND	137.42	7	<1.0	<1.0	7	290	NA	NA	NA	NA
	5/4/1998	148.02	8.18	ND	139.84	140	370	180	1,500	1,000	NA	NA	NA	NA
	7/30/1998	148.02	8.94	ND	139.08	220	110	16	73	1,100	NA	NA	NA	NA
	9/11/1998	148.02	9.64	ND	138.38	80	<1.0	17	<3	450	NA	NA	NA	NA
	10/26/1998	148.02	8.98	ND	139.04	35	<10	14	20	640	NA	NA	NA	NA
	11/13/1998	148.02	9.14	ND	138.88	<100	27	15	28	2,400	NA	NA	NA	NA
	12/17/1998	148.02	9.39	ND	138.63	4	<1.0	1	<3	120	NA	NA	NA	NA
	1/6/1999	148.02	8.79	ND	139.23	<50	41	32	250	9,100	NA	NA	NA	NA
	2/9/1999	148.02	8.12	ND	139.90	60	170	110	800	11,000	NA	NA	NA	NA
	3/29/1999	148.02	7.95	ND	140.07	120	340	70	330	1,700	NA	NA	NA	NA
	6/24/1999	148.02	9.25	ND	138.77	3.6	<5.0	<5.0	<15	749	<5	<100	130	230
	11/4/1999	148.02	8.65	ND	139.37	270	373	<25	142	13,200	<25	<500	<500	580
	1/3/2000	148.02	8.94	ND	139.08	13.4	<5.0	<5.0	<15	2,620	<5.0	<100	<100	160
	2/25/2000	148.02	8.18	ND	139.84	620	1,900	210	1,200	42,000	NS	NS	NS	NS
	4/14/2000	148.02	8.41	ND	139.61	695	2,380	372	1,929	3,370	0	<1,000	3,100	3,300
	8/21/2000	148.02	9.10	ND	138.92	118	8.5	104	34.1	7,950	0.0	<100	600	870
	11/20/2000	148.02	8.52	ND	139.50	300	168	70.5	316	3,250	0.0	<50	200	645
	2/26/2001	148.02	8.44	ND	139.58	384	926	410	1,763	9,880	0	<500	2,800	2,500
	7/16/2001	148.02	9.41	ND	138.61	188	<10	<10	<20	7,010	<10	<100	<100	117
	1/22/2002	148.02	9.40	ND	138.62	105	<10	97.4	106.1	1,960	0.0	<100	164	566
	5/7/2002	148.02	8.31	ND	139.71	213	746	372	1,560	1,950	78.1	544	1,130	2,990
	10/2/2002	147.60	9.93	ND	137.67	<2.0	<2.0	<2.0	<4.0	25.6	<3.0	<50	<50	<50
	5/10/2003	147.60	8.11	ND	139.49	18.1	249	318	963	520	61.8	489	<50	1,860
	11/13/2003	147.60	8.73	ND	138.87	<2.0	13.7	29	134	46.9	3.4	<50	<50	170
	5/18/2004	147.60	8.51	ND	139.09	<1.00	10.4	172	392	63	26.6	102	242	979
	11/19/2004	147.60	NG	NG	NA	<1.00	4.7	24.2	66.1	8.9	<5.0	<100	<100	<100
	6/20/2005	147.60	8.54	ND	139.06	<1.00	<3.00	3.9	18.9	17.5	10.2	<100	<100	<100
	12/16/2005	147.60	7.94	ND	139.66	<1.00	<3.00	13.0	18.24	23.4	6.60	199	281	539
	6/27/2006	147.60	7.55	ND	140.05	1.96	<3.00	87.8	171.7	326	38.7	481	1,820	1,910
	12/14/2006	147.60	8.63	ND	138.97	<1.00	<3.00	2.29	<6.00	<3.00	<5.00	<100	146	<50
	7/11/2007	147.60	9.06	ND	138.54	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	1/8/2008	147.60	8.32	ND	139.28	<1.00	<3.00	6.94	<6.00	<3.00	<5.00	<100	<100	339
	6/20/2008	147.60	8.74	ND	138.86	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	6/22/2009	147.60	8.20	ND	139.40	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	152
	12/23/2009	147.60	8.31	ND	139.29	3.41	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	125
	6/10/2010	147.60	8.93	ND	138.67	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	6/19/2013	147.60	8.11	ND	139.49	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<75	<25	<25
	3/26/2014	147.60	8.21	ND	139.39	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<75	<25	<25
	6/30/2014	147.60	9.09	ND	138.51	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<100	<100	<100
	3/31/2015	147.60	7.70	ND	139.90	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<100	<100	<100
	9/17/2015	147.60	9.40	ND	138.20	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	12/16/2015	147.60	9.03	ND	138.57	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	3/8/2016	147.60	8.55	ND	139.05	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	6/7/2016	147.60	8.80	ND	138.80	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100

95-214880 Global Companies LLC Mobil Station No. 1436 309 Lowell Street Andover, MA		Table 2 Concentrations of Volatile Petroleum Hydrocarbons (VPH) Detected in Groundwater														
Well No. (GW Class)	Screen Interval (ft.)	Sampling Date	Top of Casing Elevation (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	Ground Water Elevation (ft)	Benzene (µg/l)	Toluene (µg/l)	Ethyl- benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)	Naph- thalene (µg/l)	C ₅ -C ₈ Aliphatics (µg/l)	C ₉ -C ₁₂ Aliphatics (µg/l)	C ₉ -C ₁₀ Aromatics (µg/l)	
MCP Method 1 Standards				GW-1			5	1,000	700	10,000	70	140	300	700	200	
				GW-2			2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000	
				GW-3			10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000	
MW-4 (GW-1,2,3) 5-15'	4/3/1997	147.95	7.46	ND	140.49	4,720	9,150	402	2,533	34,400	NA	NA	NA	NA	NA	
	7/21/1997	147.95	9.36	ND	138.59	2,700	18,000	600	4,600	24,000	NA	NA	NA	NA	NA	
	10/22/1997	147.95	10.40	ND	137.55	3,400	16,000	700	5,900	25,000	NA	NA	NA	NA	NA	
	5/4/1998	147.95	8.00	ND	139.95	2,900	17,000	890	7,400	3,900	NA	NA	NA	NA	NA	
	7/30/1998	147.95	8.59	ND	139.36	2,600	17,000	990	7,700	3,200	NA	NA	NA	NA	NA	
	9/11/1998	147.95	9.00	ND	138.95	370	9,000	710	4,400	3,000	NA	NA	NA	NA	NA	
	10/26/1998	147.95	8.79	ND	139.16	320	3,900	250	1,700	3,700	NA	NA	NA	NA	NA	
	11/13/1998	147.95	8.97	ND	138.98	200	3,300	250	1,600	970	NA	NA	NA	NA	NA	
	12/17/1998	147.95	9.18	ND	138.77	250	5,500	430	2,800	1,600	NA	NA	NA	NA	NA	
	1/6/1999	147.95	8.65	ND	139.30	210	5,200	590	3,600	2,700	NA	NA	NA	NA	NA	
	2/9/1999	147.95	7.90	ND	140.05	200	4,600	530	3,700	4,000	NA	NA	NA	NA	NA	
	3/29/1999	147.95	7.65	ND	140.30	90	2,100	500	2,800	3,400	NA	NA	NA	NA	NA	
	6/24/1999	147.95	9.63	ND	138.32	115	3,910	1,210	8,300	11,800	280	<2,500	8,400	8,600	8,600	
	11/4/1999	147.95	8.48	ND	139.47	113	550	150	974	5,220	74	<1,000	1,000	2,400	2,400	
	1/3/2000	147.95	8.78	ND	139.17	491	2,410	580	3,510	3,520	177	1,000	4,400	6,400	6,400	
	2/16/2000	147.95	8.28	ND	139.67	243	854	281	1,548	2,340	73	<500	2,400	3,170	3,170	
	4/14/2000	147.95	7.92	ND	140.03	632	3,550	890	5,580	4,140	210	<2,500	7,700	7,000	7,000	
	8/21/2000	147.95	8.82	ND	139.13	932	5,100	400	2,550	37,100	<250	<5,000	<5,000	9,500	9,500	
	11/20/2000	147.95	8.25	ND	139.70	537	1,290	343	527	12,300	86	<100	531	1,570	1,570	
	2/26/2001	147.95	8.67	ND	139.28	455	3,190	942	5,490	5,000	245	<1,000	8,300	8,500	8,500	
	7/16/2001	147.95	9.22	ND	138.73	1,940	4,200	600	3,380	70,500	181	<500	5,480	9,190	9,190	
	9/7/2001	147.95	9.82	ND	138.13	366	432	432	1,672	42,000	128	<100	1,530	2,640	2,640	
	1/22/2002	147.95	9.28	ND	138.67	555	3,240	887	3,150	6,130	<250	<2,500	<2,500	3,750	3,750	
	5/7/2002	147.95	8.14	ND	139.81	199	1,740	291	1,660	2,350	52.9	727	850	2,460	2,460	
	10/2/2002	147.67	9.82	ND	137.85	140	1,340	613	2,466	691	151	619	214	2,570	2,570	
	5/10/2003	147.67	7.81	ND	139.86	24	705	187	851	425	45.6	1,100	<50	1,450	1,450	
	11/12/2003	147.67	8.85	ND	138.82	6	792	292	1,299	132	127	612	103	3,010	3,010	
	2/3/2004	147.67	8.86	ND	138.81	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/19/2004	147.67	8.38	ND	139.29	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	5/18/2004	147.67	8.36	ND	139.31	1.5	321	224	1,133	31.3	47	427	1,650	1,850	1,850	
	11/19/2004	147.67	NG	NG	NA	1	142	490	2,566	11.4	186	762	3,560	4,380	4,380	
	11/19/2004 Dup	147.67	NG	NG	NA	<1.0	126	500	2,646	9.8	176	648	3,370	4,480	4,480	
	6/20/2005	147.67	7.7	ND	139.97	1.1	24.8	338	2,908	123	206	931	<2,000	7,300	7,300	
	12/16/2005	147.67	Water runoff puddling over the well													
	6/27/2006	147.67	7.33	ND	140.34	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100	<100	
	12/14/2006	147.67	8.29	ND	139.38	<1.00	<3.00	8.29	41.3	<3.00	<5.00	<100	613	282	282	
	7/11/2007	147.67	8.97	ND	138.70	<1.00	<3.00	43.2	153.8	<3.00	25.4	163	1,680	1,840	1,840	
	1/8/2008	147.67	8.10	ND	139.57	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	<100	
	6/20/2008	147.67	8.61	ND	139.06	<1.00	<3.00	16.6	16.02	<3.00	6.35	134	197	561	561	
	1/14/2009	147.67	8.08	ND	139.59	<1.00	<3.00	7.15	7.13	<3.00	<5.00	134	275	731	731	
	6/22/2009	147.67	6.35	ND	141.32	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	282	282	
	12/23/2009	147.67	8.11	ND	139.56	3.23	<3.00	1.92	<6.00	<3.00	<5.00	183	184	562	562	
	6/10/2010	147.67	8.74	ND	138.93	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	109	121	256	256	
	6/28/2011	147.67	8.07	ND	139.60	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<75.0	<25.0	<25.0	<25.0	
	9/28/2011	147.67	8.45	ND	139.22	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<75.0	66.6	<25.0	<25.0	
12/22/2011	147.67	8.01	ND	139.66	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<75.0	<25.0	<25.0	<25.0		
3/8/2012	147.67	8.15	ND	139.52	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<75.0	<25.0	<25.0	<25.0		
6/20/2012	147.67	8.72	ND	138.95	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75.0	49.1	60.4	60.4		
3/27/2013	147.67	7.70	ND	139.97	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75.0	28	38.9	38.9		
12/16/2013	147.67	9.08	ND	138.59	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75.0	<25.0	<25.0	<25.0		
6/30/2014	147.67	8.95	ND	138.72	1.6	<1.0	<1.0	<2.0	16	<5.0	<100	<100	<100	<100		
12/8/2014	147.67	7.61	ND	140.06	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100	<100		
9/17/2015	147.67	9.26	ND	138.41	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100	<100		
12/16/2015	147.67	8.95	ND	138.72	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100	<100		
3/8/2016	147.67	8.36	ND	139.31	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100	<100		
MW-5D (GW-1,3) 26-31'	10/2/2002	147.44	9.47	ND	137.97	82.7	740	612	4,280	1,410	290	1260	895	3950	3950	
	11/18/2002	147.44	7.91	ND	139.53	26.4	4.1	268	659	378	184	1930	1080	2880	2880	
	5/10/2003	147.44	7.24	ND	140.20	8.4	2.3	76.5	140.8	131	51.8	699	<50	728	728	
	11/13/2003	147.44	8.56	ND	138.88	<2.0	<2.0	28.6	7.8	172	8.5	117	<50	235	235	
	5/18/2004	147.44	7.99	ND	139.45	<1.00	<3.0	9.1	<6.0	18	<5.0	<100	<100	<100	<100	
	11/18/2004	147.44	NG	NG	NA	<1.00	<3.0	1.8	<6.0	11	<5.0	<100	<100	<100	<100	
	6/20/2005	147.44	7.92	ND	139.52	<1.00	<3.0	3.7	<6.0	6.0	<5.0	<100	<100	<100	<100	
	12/16/2005	147.44	7.38	ND	140.06	<1.00	<3.00	1.88	<4.00	3.84	<5.00	<100	<100	<100	<100	
	6/27/2006	147.44	6.90	ND	140.54	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100	<100	
	7/11/2007	147.44	9.05	ND	138.39	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	<100	
	1/8/2008	147.44	7.72	ND	139.72	<1.00	<3.00	23.3	72.6	<3.00	7.71	<100	<100	557	557	
	6/20/2008	147.44	8.25	ND	139.19	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100	<100	
	12/23/2008	147.44	7.52	ND	NA	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	<100	
6/22/2009	147.44	7.58	ND	139.86	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	<100		
12/23/2009	147.44	7.34	ND	140.10	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	<100		
6/10/2010	147.44	7.20	ND	140.24	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	<100		
MW-5DD (GW-1,3) 68-73'	5/10/200															

95-214880 Global Companies LLC Mobil Station No. 1436 309 Lowell Street Andover, MA		Table 2 Concentrations of Volatile Petroleum Hydrocarbons (VPH) Detected in Groundwater													
Well No. (GW Class) Screen Interval (ft.)	Sampling Date	Top of Casing Elevation (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	Ground Water Elevation (ft)	Benzene (µg/l)	Toluene (µg/l)	Ethyl- benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)	Naph- thalene (µg/l)	C ₅ -C ₈ Aliphatics (µg/l)	C ₉ -C ₁₂ Aliphatics (µg/l)	C ₉ -C ₁₀ Aromatics (µg/l)	
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200	
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000	
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000	
OW-A (GW-1,3) 1-14'	6/22/1998	144.74	4.84	ND	139.90	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA	
	7/30/1998	144.74	5.67	ND	139.07	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA	
	9/11/1998	144.74	6.57	ND	138.17	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA	
	10/26/1998	144.74	5.72	ND	139.02	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA	
	11/13/1998	144.74	5.85	ND	138.89	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA	
	12/17/1998	144.74	6.12	ND	141.62	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA	
	1/6/1999	144.74	5.57	ND	139.17	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA	
	2/9/1999	144.74	5.50	ND	139.24	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA	
	3/29/1999	144.74	4.82	ND	139.92	<1.0	<1.0	<1.0	<3	1	NA	NA	NA	NA	
	6/24/1999	144.74	5.89	ND	138.85	<1.0	<5.0	<5.0	<15	<5.0	<5	<100	<100	<100	
	11/20/2000	144.74	5.26	ND	139.48	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50	
	10/2/2002	144.34	6.88	ND	137.46	<2.0	<2.0	<2.0	<4.0	<2.0	<3.0	<50	<50	<50	
	11/13/2003	144.34	5.32	ND	139.02	<2.0	<2.0	<2.0	<4.0	<2.0	<3.0	<50	<50	<50	
OW-B (GW-1,3) 3.5-1 6.5'	1/31/1997	148.52	9.54	ND	138.98	67	626	860	6,970	15,100	NA	NA	NA	NA	
	4/3/1997	148.52	10.04	ND	138.48	128	297	512	3,880	9,930	NA	NA	NA	NA	
	7/21/1997	148.52	10.72	ND	137.80	250	700	560	4,200	14,000	NA	NA	NA	NA	
	10/22/1997	148.52	11.53	ND	136.99	400	400	500	3,100	26,000	NA	NA	NA	NA	
	5/4/1998	148.52	9.26	ND	139.26	90	100	140	1,200	5,900	NA	NA	NA	NA	
	7/30/1998	148.52	10.25	ND	138.27	<500	350	480	2,400	8,800	NA	NA	NA	NA	
	9/11/1998	148.52	11.04	ND	137.48	290	490	500	3,200	11,000	NA	NA	NA	NA	
	10/26/1998	148.52	10.35	ND	138.17	550	910	610	3,200	12,000	NA	NA	NA	NA	
	11/13/1998	148.52	10.40	ND	138.12	500	1,400	670	4,500	15,000	NA	NA	NA	NA	
	12/17/1998	148.52	10.71	ND	137.79	320	850	590	4,400	6,500	NA	NA	NA	NA	
	1/6/1999	148.52	10.09	ND	138.43	<500	380	450	3,500	4,000	NA	NA	NA	NA	
	2/9/1999	148.52	9.63	ND	138.89	100	540	510	4,300	7,000	NA	NA	NA	NA	
	3/29/1999	148.52	9.52	ND	139.00	230	400	450	3,500	9,000	NA	NA	NA	NA	
	6/24/1999	148.52	10.72	ND	137.80	457	780	540	3,920	8,680	<250	<5,000	<5,000	5,100	
	11/4/1999	148.52	9.94	ND	138.58	179	750	440	2,830	10,500	170	<2,500	<2,500	7,300	
	1/3/2000	148.52	10.20	ND	138.32	265	542	460	2,890	20,500	217	<1,000	4,100	7,100	
	2/16/2000	148.52	9.76	ND	138.76	433	890	463	3,020	22,200	202	<1,000	5,400	7,000	
	2/25/2000	148.52	9.37	ND	139.15	450	860	450	3,300	30,000	NS	NS	NS	NS	
	4/14/2000	148.52	6.73	ND	141.79	409	880	560	4,180	13,100	250	<2,500	6,200	6,800	
	8/21/2000	148.52	10.22	ND	138.30	262	1,230	655	4,330	9,270	254	<1,000	5,100	7,100	
	11/20/2000	148.52	9.45	ND	139.07	13.2	28.2	12.2	115.2	2,250	<5	<50	75.5	252	
	2/26/2001	148.52	9.38	ND	139.14	<1.0	<5.0	<5.0	<15	41	<5	<100	<100	<100	
	7/16/2001	148.52	10.64	ND	137.88	214	108	253	431.2	11,400	81.4	<100	842	1,380	
	9/7/2001	148.52	11.26	ND	137.26	1940	5,250	953	8,460	19,800	199	<250	4570	8,070	
	1/22/2002	148.52	11.68	ND	136.84	97.4	<50	90.6	335	5,070	<50	<500	<500	1,520	
	5/7/2002	148.52	9.43	ND	139.09	185	75.5	291	1,108	7,450	121	345	1,060	4,030	
	10/2/2002	148.12	10.92	ND	137.20	<2.0	<2.0	<2.0	<4.0	76	<3.0	<50	<50	<50	
	5/10/2003	148.12	9.28	ND	138.84	<2.0	<2.0	2.4	2.9	24	<3.0	<50	<50	<50	
	11/13/2003	148.12	10.03	ND	138.6	<2.0	<2.0	<2.0	<2.0	7	<3.0	<50	<50	<50	
	5/18/2004	148.12	9.75	ND	138.37	22.7	<3.0	128	44.1	2,410	<5.0	127	248	1,120	
	11/17/2004	148.12	NG	NG	NA	6.4	12.2	175	386.8	154	81.7	504	2,090	2,440	
	6/2/2005	148.12	10.03	ND	138.09	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100	
	12/16/2005	148.12	9.23	ND	138.89	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100	
	6/27/2006	148.12	8.71	ND	139.41	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100	
	12/14/2006	148.12	9.84	ND	138.28	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	
	7/10/2007	148.12	9.98	ND	138.14	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	
	10/17/2007	148.12	10.56	ND	137.56	<1.00	<3.00	<1.00	<6.00	3.91	<5.00	<100	199	95.9	
	1/8/2008	148.12	9.30	ND	138.82	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	78.5	
	3/21/2008	148.12	8.52	ND	139.60	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	
	6/20/2008	148.12	9.74	ND	138.38	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	118	<500	
9/25/2008	148.12	9.81	ND	138.31	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	76.2		
12/18/2008	148.12	8.90	ND	139.22	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100		
3/10/2009	148.12	8.75	ND	139.37	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	124	<100		
6/22/2009	148.12	9.16	ND	138.96	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	153	<100	259		
9/17/2009	148.12	9.53	ND	138.59	1.14	<3.00	2.51	4.04	<3.00	<5.00	164	126	248		
12/23/2009	148.12	9.30	ND	138.82	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100		
4/21/2010	148.12	9.31	ND	138.81	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	57.7		
6/11/2010	148.12	9.83	ND	138.29	1.40	<3.00	<1.00	<6.00	<3.00	<5.00	151	109	191		
6/28/2011	148.12	9.56	ND	138.56	<5.0	<5.0	<5.0	<10.0	<5.0	10.5	160	152	81.7		
12/12/2012	148.12	9.98	ND	138.14	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	184	42.8	73.9		
3/26/2014	148.12	9.25	ND	138.87	<5.0	<5.0	<5.0	<10.0	<5.0	8.7	127	99.3	76.3		
9/11/2014	148.12	10.44	ND	137.68	<1.0	<1.0	1.6	<2.0	1.5	<5.0	190	<100	130		

95-214880 Global Companies LLC Mobil Station No. 1436 309 Lowell Street Andover, MA		Table 2 Concentrations of Volatile Petroleum Hydrocarbons (VPH) Detected in Groundwater												
Well No. (GW Class)	Screen Interval (ft.)	Top of Casing Elevation (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	Ground Water Elevation (ft)	Benzene (µg/l)	Toluene (µg/l)	Ethyl- benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)	Naph- thalene (µg/l)	C ₃ -C ₈ Aliphatics (µg/l)	C ₉ -C ₁₂ Aliphatics (µg/l)	C ₉ -C ₁₀ Aromatics (µg/l)
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000
OW-BD (GW-1,3) 20-25'	11/20/2000	147.93	9.38	ND	138.55	124	12.6	151	201.6	8,170	38.4	<50	238	782
	2/26/2001	147.93	9.06	ND	138.87	84	<5.0	108	128	4,520	18.7	<100	380	420
	1/22/2002	147.93	10.20	ND	137.73	<5.0	<5.0	<5.0	<10	646	10	<50	<50	<50
	5/7/2002	147.93	8.96	ND	138.97	<5.0	<5.0	<5.0	<10	870	<5.0	<50	<50	<50
	10/2/2002	147.65	10.44	ND	137.21	29.1	<2.0	72.1	62.7	1,480	<3.0	<50	<50	145
	5/10/2003	147.65	8.83	ND	138.82	16.4	3.2	134	102.6	967	34.2	<50	<50	710
	11/13/2003	147.65	9.55	ND	138.10	<2.0	<2.0	4.1	4.7	254	<3.0	<50	<50	64
	5/18/2004	147.65	9.27	ND	138.38	1.3	<3.0	2.1	<6.0	113	<5.0	<100	<100	<100
	11/17/2004	147.65	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	3.5	<5.0	<100	<100	<100
	6/2/2005	147.65	9.58	ND	138.07	<1.00	<3.0	<1.0	<6.0	< 3.0	<5.0	<100	<100	<100
	12/16/2005	147.65	8.78	ND	138.87	<1.00	<3.00	<1.0	<4.00	<3.00	<5.00	<100	<100	<100
	6/27/2006	147.65	8.21	ND	139.44	<1.00	<3.00	<1.00	<4.00	< 3.00	<5.00	<100	<100	<100
	12/14/2006	147.65	9.40	ND	138.25	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	7/10/2007	147.65	9.48	ND	138.17	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	1/8/2008	147.65	8.82	ND	138.83	<1.00	<3.00	<1.00	<6.00	4.29	<5.00	<100	<100	<100
	6/20/2008	147.65	9.28	ND	138.37	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	12/18/2008	147.65	8.41	ND	139.24	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/22/2009	147.65	8.67	ND	138.98	<1.00	<3.00	<1.00	<6.00	18	<5.00	<100	<100	<100
	12/23/2009	147.65	8.80	ND	138.85	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/11/2010	147.65	9.40	ND	138.25	<1.00	<3.00	<1.00	<6.00	20.2	<5.00	<100	<100	<100
OW-C (GW-1,3) 0.3-12'	5/4/1998	141.22	2.65	ND	138.57	<1.0	<1.0	<1.0	<3	84	NA	NA	NA	NA
	11/13/1998	141.22	3.04	ND	138.18	<1.0	<1.0	<1.0	<3	1	NA	NA	NA	NA
	12/17/1998	141.22	3.31	ND	137.91	<1.0	<1.0	<1.0	<3	2	NA	NA	NA	NA
	1/6/1999	141.22	2.95	ND	138.27	<1.0	<1.0	<1.0	<3	8	NA	NA	NA	NA
	2/9/1999	141.22	5.85	ND	135.37	<1.0	<1.0	<1.0	<3	<1	NA	NA	NA	NA
	3/29/1999	141.22	2.55	ND	138.67	<1.0	<1.0	<1.0	<3	43	NA	NA	NA	NA
	6/24/1999	141.22	3.28	ND	137.94	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	11/4/1999	141.22	2.90	ND	138.32	<1.0	<5.0	<5.0	<15	24.6	<5.0	<100	<100	<100
	12/14/2006	140.82	2.5	ND	138.32	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	7/10/2007	140.82	2.83	ND	137.99	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	1/8/2008	140.82	2.28	ND	138.54	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/20/2008	140.82	2.70	ND	138.12	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	1/14/2009	140.82	2.25	ND	138.57	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/22/2009	140.82	2.21	ND	138.61	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/10/2010	140.82	3.02	ND	137.80	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
OW-D (GW-1,3) 1-9'	11/4/1999	141.36	3.49	ND	139.25	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	11/20/2000	141.36	3.56	ND	137.80	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<50	<50
OW-ED (GW-1,3) 25-35'	11/20/2000	148.60	9.73	ND	138.87	6.8	<5.0	<5.0	<10	326	<5.0	<50	<50	<50
	2/26/2001	148.60	9.56	ND	139.04	8.1	<5.0	<5.0	<15	87.4	<5.0	<100	<100	<100
	10/2/2002	148.33	11.04	ND	137.29	3.5	<2.0	<2.0	<4.0	222	<3.0	<50	<50	<50
	11/18/2002	148.33	9.13	ND	139.20	3.5	<2.0	<2.0	<4.0	213	<3.0	<50	<50	<50
	5/10/2003	148.33	9.23	ND	139.10	<2.0	<2.0	<2.0	<4.0	22.2	<3.0	<50	<50	<50
	11/13/2003	148.33	10.04	ND	138.39	3.4	<1.0	<1.0	<1.0	186	NS	NS	NS	NS
	5/18/2004	148.33	9.77	ND	138.56	3.1	<3.0	<1.0	<6.0	45.4	<5.0	<100	<100	<100
	May 18 04 Dup.	148.33	9.77	ND	138.56	3.6	<3.0	<1.0	<6.0	36.2	<5.0	<100	<100	<100
	11/17/2004	148.33	NG	NG	NA	4.4	<3.0	<1.0	<6.0	120	<5.0	<100	<100	<100
	6/2/2005	148.33	9.7	ND	138.63	1.9	<3.0	<1.0	<6.0	80.4	<5.0	<100	<100	<100
	12/15/2005	148.33	9.02	ND	139.31	<1.00	<3.00	<1.00	<4.00	105	<5.00	<100	<100	<100
	6/27/2006	148.33	8.60	ND	139.73	<1.00	<3.00	<1.00	<4.00	111	<5.00	<100	<100	<100
	12/14/2006	148.33	9.71	ND	138.62	<1.00	<3.00	<1.00	<6.00	117	<5.00	<100	<100	<100
	7/10/2007	148.33	10.03	ND	138.30	<1.00	<3.00	<1.00	<6.00	61.5	<5.00	<100	<100	<100
	1/8/2008	148.33	9.35	ND	138.98	<1.00	<3.00	<1.00	<6.00	55.2	<5.00	<100	<100	<100
	6/20/2008	148.33	9.88	ND	138.45	<1.00	<3.00	<1.00	<4.00	109	<5.00	<100	<100	<100
	12/18/2008	148.33	8.89	ND	139.44	<1.00	<3.00	<1.00	<6.00	113	<5.00	<100	<100	<100
	6/22/2009	148.33	9.18	ND	139.15	<1.00	<3.00	<1.00	<6.00	141	<5.00	<100	<100	<100
	12/23/2009	148.33	9.40	ND	138.93	<1.00	<3.00	<1.00	<6.00	164	<5.00	<100	<100	<100
	6/11/2010	148.33	10.00	ND	138.33	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/28/2011	148.33	10.17	ND	138.16	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<75.0	<25.0	<25.0
	9/28/2011	148.33	09.71	ND	138.62	<5.0	<5.0	<5.0	<10.0	34.2	<5.0	<75.0	47.6	<25.0
	12/22/2011	148.33	09.11	ND	139.22	<5.0	<5.0	<5.0	<10.0	5	<5.0	<75.0	<25.0	<25.0
	9/10/2012	148.33	10.33	ND	138.00	<5.0	6.4	17.9	<10.0	5	13.3	162	190	188
	12/12/2012	148.33	10.05	ND	138.28	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<75.0	<25.0	26.6
	3/27/2013	148.33	9.02	ND	139.31	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<75.0	<25.0	<25.0
	6/19/2013	148.33	8.19	ND	140.14	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<75.0	<25.0	<25.0
	12/16/2013	148.33	9.27	ND	139.06	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75.0	<25.0	<25.0
	3/31/2015	148.33	8.8	ND	139.53	<1.0	<1.0	<1.0	<3.0	16	<5.0	<100	<100	<100
	9/17/2015	148.33	24.5	ND	123.83	<1.0	<1.0	<1.0	<3.0	90	<5.0	<100	<100	<100
	12/16/2015	148.33	10.07	ND	138.26	<1.0	<1.0	<1.0	<3.0	28	<5.0	<100	<100	<100
	3/8/2016	148.33	9.61	ND	138.72	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<100	<100	<100
	6/7/2016	148.33	9.83	ND	138.50	<1.0	<1.0	<1.0	<3.0	7.9	<5.0	<100	<100	<100

95-214880 Global Companies LLC Mobil Station No. 1436 309 Lowell Street Andover, MA		Table 2 Concentrations of Volatile Petroleum Hydrocarbons (VPH) Detected in Groundwater													
Well No. (GW Class) Screen Interval (ft.)	Sampling Date	Top of Casing Elevation (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	Ground Water Elevation (ft)	Benzene (µg/l)	Toluene (µg/l)	Ethyl- benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)	Naph- thalene (µg/l)	C ₅ -C ₈ Aliphatics (µg/l)	C ₉ -C ₁₂ Aliphatics (µg/l)	C ₉ -C ₁₀ Aromatics (µg/l)	
MCP Method 1 Standards		GW-1			5	1,000	700	10,000	70	140	300	700	200		
		GW-2			2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000		
		GW-3			10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000		
OW-F (GW-1,3) 5-15' Note: Well is confirmed to be obstructed	7/30/1998	147.08	8.07	ND	139.01	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA	
	9/11/1998	147.08	8.90	ND	138.18	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA	
	10/26/1998	147.08	8.08	ND	139.00	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA	
	11/13/1998	147.08	8.25	ND	138.83	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA	
	12/17/1998	147.08	8.56	ND	138.52	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA	
	1/6/1999	147.08	7.92	ND	139.16	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA	
	2/9/1999	147.08	7.05	ND	140.03	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA	
	3/29/1999	147.08	6.85	ND	140.23	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA	
6/24/1999	147.08	8.53	ND	138.55	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100		
OW-G (GW-1,3) 5-15'	7/30/1998	147.57	8.91	ND	138.66	<5	<1.0	<1.0	<3	5	NA	NA	NA	NA	
	9/11/1998	147.57	9.60	ND	137.97	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA	
	10/26/1998	147.57	8.84	ND	138.73	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA	
	11/13/1998	147.57	8.96	ND	138.61	<1.0	<1.0	<1.0	<3	1	NA	NA	NA	NA	
	12/17/1998	147.57	9.23	ND	138.34	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA	
	1/6/1999	147.57	8.62	ND	138.95	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA	
	2/9/1999	147.57	8.00	ND	139.57	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA	
	3/29/1999	147.57	7.85	ND	139.72	<1.0	<1.0	<1.0	9	10	NA	NA	NA	NA	
	6/24/1999	147.57	9.30	ND	138.27	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100	
	11/4/1999	147.57	8.47	ND	139.10	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100	
	1/3/2000	147.57	8.75	ND	138.82	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100	
	4/14/2000	147.57	8.32	ND	139.25	<1.0	<5.0	<5.0	<15	6.9	<5.0	<100	<100	<100	
	10/2/2002	147.19	9.71	ND	137.48	<2.0	<2.0	<2.0	<4.0	<2.0	<3.0	<50	<50	<50	
	5/10/2003	147.19	7.42	ND	139.77	<1.0	3	1.5	12.5	23.2	NS	NS	NS	NS	
	5/18/2004	147.19	8.35	ND	138.84	<1.00	7.1	5	17.1	85.2	<5.0	<100	<100	<100	
	11/19/2004	147.19	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100	
	6/20/2005	147.19	8.26	ND	138.93	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100	
	12/16/2005	147.19	6.49	ND	140.70	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100	
	6/27/2006	147.19	7.00	ND	140.19	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100	
	12/14/2006	147.19	8.34	ND	138.85	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	
	7/11/2007	147.19	8.78	ND	138.41	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	
	1/8/2008	147.19	8.07	ND	139.12	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	
	6/20/2008	147.19	8.51	ND	138.68	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100	
	1/14/2009	147.19	7.92	ND	139.27	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	
	6/22/2009	147.19	7.80	ND	139.39	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	
	12/23/2009	147.19	8.00	ND	139.19	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	
	6/10/2010	147.19	8.70	ND	138.49	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	
	9/30/2010	147.19	9.78	ND	137.41	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75	<25	<25	
12/29/2010	147.19	8.93	ND	138.26	<5.00	<5.00	<5.00	<15.00	<5.00	<5.00	<75	<25	<25		
3/31/2011	147.19	7.58	ND	139.61	<5.00	<5.00	<5.00	<15.00	<5.00	<5.00	<75	<25	<25		
6/28/2011	147.19	7.81	ND	139.38	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<75.0	<25.0	<25.0		
OW-H (GW-1,3) 4-16'	5/20/1998	147.55	NG	ND	NG	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA	
	7/30/1998	147.55	9.34	ND	138.21	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA	
	9/11/1998	147.55	10.00	ND	137.55	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA	
	10/26/1998	147.55	9.26	ND	138.29	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA	
	11/13/1998	147.55	9.31	ND	138.24	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA	
	12/17/1998	147.55	9.59	ND	137.96	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA	
	1/6/1999	147.55	8.94	ND	138.61	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA	
	2/9/1999	147.55	8.56	ND	138.99	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA	
	3/29/1999	147.55	8.40	ND	139.15	<1.0	<1.0	<1.0	<3	<1.0	NA	NA	NA	NA	
	6/24/1999	147.55	9.74	ND	137.81	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100	
	10/2/2002	147.25	10.02	ND	137.23	<2.0	<2.0	<2.0	<4.0	<2.0	<3.0	<50	<50	<50	
	5/18/2004	147.25	9.03	ND	138.22	<1.00	<3.0	<1.0	<6.0	3.5	<5.0	<100	<100	<100	
	11/19/2004	147.25	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100	
	6/2/2005	147.25	7.80	ND	139.45	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100	
	12/16/2005	147.25	7.81	ND	139.44	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100	
	6/27/2006	147.25	7.68	ND	139.57	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100	
	12/13/2006	147.25	8.68	ND	138.57	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	
	7/10/2007	147.25	9.10	ND	138.15	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	
	1/7/2008	147.25	8.39	ND	138.86	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	
	6/20/2008	147.25	8.82	ND	138.43	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100	
12/18/2008	147.25	7.94	ND	139.31	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100		
6/22/2009	147.25	8.28	ND	138.97	<1.00	<3.00	<1.00	<6.00	4.0	<5.00	<100	<100	<100		
12/23/2009	147.25	8.47	ND	138.78	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100		
6/10/2010	147.25	9.11	ND	138.14	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100		

95-214880 Global Companies LLC Mobil Station No. 1436 309 Lowell Street Andover, MA		Table 2 Concentrations of Volatile Petroleum Hydrocarbons (VPH) Detected in Groundwater													
Well No. (GW Class) Screen Interval (ft.)	Sampling Date	Top of Casing Elevation (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	Ground Water Elevation (ft)	Benzene (µg/l)	Toluene (µg/l)	Ethyl- benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)	Naph- thalene (µg/l)	C ₅ -C ₈ Aliphatics (µg/l)	C ₉ -C ₁₂ Aliphatics (µg/l)	C ₉ -C ₁₀ Aromatics (µg/l)	
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200	
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000	
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000	
OW-I (GW-1,3) Total depth = 12.5'	5/27/1998	146.61	NG	ND	NG	<1.0	<1.0	<1.0	<3.0	200	NA	NA	NA	NA	
	7/30/1998	146.61	8.18	ND	138.43	24	<1.0	<1.0	<3.0	3,200	NA	NA	NA	NA	
	9/11/1998	146.61	8.81	ND	137.80	<1.0	<1.0	3	<3.0	2,800	NA	NA	NA	NA	
	10/26/1998	146.61	8.09	ND	138.52	<20	<1.0	<1.0	<3.0	2,100	NA	NA	NA	NA	
	11/13/1998	146.61	8.19	ND	138.42	<20	<1.0	<1.0	<3.0	1,200	NA	NA	NA	NA	
	12/17/1998	146.61	8.41	ND	138.20	<1.0	<1.0	<1.0	<3.0	780	NA	NA	NA	NA	
	1/6/1999	146.61	7.74	ND	138.87	<10	<1.0	<1.0	<3.0	670	NA	NA	NA	NA	
	2/9/1999	146.61	7.40	ND	139.21	<1.0	<1.0	<1.0	<3.0	360	NA	NA	NA	NA	
	3/29/1999	146.61	7.13	ND	139.48	13	<1.0	2	<3.0	1,400	NA	NA	NA	NA	
	4/26/1999	146.61	7.74	ND	138.87	8.8	<5.0	<5.0	<5.0	1,100	<5	<50	<50	<50	
	5/27/1999	146.61	7.84	ND	138.77	20	<1	26	<5.0	1,000	NA	NA	NA	NA	
	6/24/1999	146.61	8.62	ND	137.99	10.2	<5.0	28.1	<15	807	<5	<100	<100	<100	
	7/20/1999	146.61	8.81	ND	137.80	<5.0	<1	5	<3.0	530	NA	NA	NA	NA	
	11/4/1999	146.61	7.70	ND	138.91	<1.0	<5.0	<5.0	<15	104	<5.0	<100	<100	<100	
	1/3/2000	146.61	8.03	ND	138.58	<1.0	<5.0	<5.0	<15	61.4	<5.0	<100	<100	<100	
	2/16/2000	146.61	7.43	ND	139.18	<1.0	<5.0	<5.0	<15	61.3	<5.0	<100	<100	<100	
	2/25/2000	146.61	6.87	ND	139.74	<1.0	<1.0	<1.0	<3.0	100	NS	NS	NS	NS	
	4/14/2000	146.61	7.73	ND	138.88	<1.0	<5.0	<5.0	<15	96	<5.0	<100	<100	<100	
	8/21/2000	146.61	8.21	ND	138.40	<1.0	<5.0	<5.0	<15	28.5	<5.0	<100	<100	<100	
	11/20/2000	146.61	7.65	ND	138.96	<1.0	<5.0	<5.0	<10	244	<5.0	<50	<50	<50	
	2/26/2001	146.61	7.68	ND	138.93	<1.0	<5.0	<5.0	<15	510	<5.0	<100	<100	<100	
	7/16/2001	146.61	8.61	ND	138.00	<5.0	<5.0	<5.0	<10	873	<5.0	<50	<50	<50	
	1/22/2002	146.61	8.48	ND	138.13	<5.0	<5.0	<5.0	<10	2,540	<5.0	<50	<50	<50	
	5/7/2002	146.61	7.38	ND	139.23	<5.0	<5.0	<5.0	<10	561	17.8	<50	<50	<50	
	11/13/2003	145.43	7.91	ND	137.52	<1.0	<1.0	<1.0	<3.0	191	NS	NS	NS	NS	
	5/20/2004	145.43	7.67	ND	137.76	<1.00	<3.0	<1.0	<6.0	21.5	<5.0	<100	<100	<100	
	6/2/2005	145.43	7.27	ND	138.16	<1.00	<3.0	<1.0	<6.0	< 3.0	<5.0	<100	<100	<100	
	12/15/2005	145.43	6.13	ND	139.30	<1.00	<3.00	<1.00	<4.00	< 3.00	<5.00	<100	<100	<100	
	6/26/2006	145.43	6.19	ND	139.24	<1.00	<3.00	<1.00	<4.00	< 3.00	<5.00	<100	<100	<100	
	12/13/2006	145.43	7.54	ND	137.89	<1.00	<3.00	<1.00	<6.00	4.71	<5.00	<100	<100	<100	
	7/10/2007	145.43	7.99	ND	137.44	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	
	1/7/2008	145.43	7.34	ND	138.09	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	
	6/19/2008	145.43	7.71	ND	137.72	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100	
	1/14/2009	145.43	7.14	ND	138.29	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	
	6/19/2009	145.43	7.17	ND	138.26	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	
	12/22/2009	145.43	9.05	ND	136.38	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	
	6/10/2010	145.43	3.01	ND	142.42	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	
OW-J (GW-1,3) Total depth = 12.8'	5/27/1998	146.63	NG	NG	NA	11	<1.0	<1.0	<3	2,900	NA	NA	NA	NA	
	7/30/1998	146.63	7.92	ND	138.71	<500	20	120	220	13,000	NA	NA	NA	NA	
	9/11/1998	146.63	8.50	ND	138.13	34	<1.0	1	<3	1,100	NA	NA	NA	NA	
	10/26/1998	146.63	7.87	ND	138.76	18	<1.0	<1.0	<3	830	NA	NA	NA	NA	
	11/13/1998	146.63	7.80	ND	138.83	<100	<1.0	6	<3	2,300	NA	NA	NA	NA	
	12/17/1998	146.63	8.56	ND	138.05	43	<1.0	21	<3	2,700	NA	NA	NA	NA	
	1/6/1999	146.63	7.52	ND	139.11	3	<1.0	<1	<3	720	NA	NA	NA	NA	
	2/9/1999	146.63	7.30	ND	139.33	35	1	24	<3	1500	NA	NA	NA	NA	
	3/29/1999	146.63	7.08	ND	139.55	<1.0	<1.0	<1.0	<3	100	NA	NA	NA	NA	
	4/26/1999	146.63	7.53	ND	139.10	116	<5.0	75.2	<15	5,150	62	<50	299	330	
	5/27/1999	146.63	7.54	ND	139.09	130	2	66	<3	6,500	NA	NA	NA	NA	
	6/24/1999	146.63	8.20	ND	138.43	54	<5.0	<5.0	<150	3,780	<50	<1,000	<1,000	<1,000	
	7/20/1999	146.63	8.34	ND	138.29	<10	<1.0	<1.0	<3	460	NA	NA	NA	NA	
	11/4/1999	146.63	7.50	ND	139.13	3	<5.0	<5.0	<15	473	<5.0	<100	<100	<100	
	1/3/2000	146.63	7.70	ND	138.93	9.7	<5.0	<5.0	<15	513	<5.0	<100	<100	<100	
	2/16/2000	146.63	7.44	ND	139.19	3.4	<5.0	<5.0	<15	165	<5.0	<100	<100	<100	
	2/25/2000	146.63	7.02	ND	139.61	4.6	<1.0	4.6	<3.0	260	NS	NS	NS	NS	
	4/14/2000	146.63	7.61	ND	139.02	<1.0	<5.0	<5.0	<15	194	<5.0	<100	<100	<100	
	8/21/2000	146.63	7.97	ND	138.66	10.5	<5.0	<5.0	<15	957	<5.0	<100	<100	<100	
	11/20/2000	146.63	7.74	ND	138.89	<5.0	<5.0	<5.0	<10	322	<5.0	<50	<50	<50	
	2/26/2001	146.63	8.63	ND	138.00	72.6	<5.0	35.2	<15	3,180	6.3	<100	150	200	
	7/16/2001	146.63	7.91	ND	138.72	43	<5.0	<5.0	<10	2,700	<5.0	<50	129	258	
	9/7/2001	146.63	9.59	ND	137.04	<5.0	<5.0	<5.0	<10	146	<5.0	<50	<50	54.8	
	5/7/2002	146.63	7.34	ND	139.29	<5.0	<5.0	<5.0	<10	512	<5.0	<50	<50	<50	
	5/20/2004	145.46	7.50	ND	137.96	<1.00	<3.0	<1.0	<6.0	144	<5.0	<100	<100	<100	
	11/8/2004	145.46	NG	NG	NA	<1.00	<3.0	8.1	<6.0	1,050	<5.0	<100	<100	<100	
	6/2/2005	145.46	7.4	ND	138.06	<1.00	<3.0	< 3.0	<6.0	< 3.0	<5.0	<100	<100	<100	
	12/15/2005	145.46	5.71	ND	139.75	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100	
	6/26/2006	145.46	6.26	ND	139.20	<1.00	<3.00	<1.00	<4.00	< 3.00	<5.00	<100	<100	<100	
	12/13/2006	145.46	7.15	ND	138.31	<1.00	<3.00	<1.00	<6.00	3.70	<5.00	<100	<100	<100	
	7/10/2007	145.46	7.59	ND	137.87	<1.00	<3.00	<1.00	<6.00	8.12	<5.00	<100	<100	<100	
	1/7/2008	145.46	7.01	ND	138.45	<1.00	<3.00	<1.00	<6.00	4.22	<5.00	<100	<100	<100	
	6/19/2008	145.46	7.32	ND	138.14	<1.00	<3.00	<1.00	<4.00	5.01	<5.00	<100	<100	<100	
	1/14/2009	145.46	6.88	ND	138.58	<1.00	<3.00	<1.00	<6.00	13.5	<5.00	<100	<100	<100	
	6/19/2009	145.46	6.75	ND	138.71	<1.00	<3.00	<1.00	<6.00	8.09	<5.00	<100	<100	<100	
	12/22/2009	145.46	6.90	ND	138.56	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100	
	6/11/2010	145.46	7.61	ND	137.85	<1.00	<3.00	<1.00	<6.00	17.7	<5.00	<100	<100	<100	
6/28/2011	145.46	6.93	ND	138.53	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75.0	<25.0	<25.0		

95-214880 Global Companies LLC Mobil Station No. 1436 309 Lowell Street Andover, MA		Table 2 Concentrations of Volatile Petroleum Hydrocarbons (VPH) Detected in Groundwater												
Well No. (GW Class) Screen Interval (ft.)	Sampling Date	Top of Casing Elevation (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	Ground Water Elevation (ft)	Benzene (µg/l)	Toluene (µg/l)	Ethyl- benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)	Naph- thalene (µg/l)	C ₅ -C ₈ Aliphatics (µg/l)	C ₉ -C ₁₂ Aliphatics (µg/l)	C ₉ -C ₁₀ Aromatics (µg/l)
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000
OW-K (GW-1,3) 3-16'	6/24/1999	145.14	8.03	ND	137.11	<1.0	<5.0	<5.0	<15	554	<5	<100	<100	<100
	8/20/1999	145.14	8.10	ND	137.04	<1.0	<5.0	<5.0	<15	662	<5.0	<100	<100	<100
	11/4/1999	145.14	6.81	ND	138.33	<1.0	<5.0	<5.0	<15	321	<5.0	<100	<100	<100
	1/3/2000	145.14	7.34	ND	137.80	<1.0	<5.0	<5.0	<15	340	<5.0	<100	<100	<100
	4/14/2000	145.14	6.91	ND	138.23	<1.0	<5.0	<5.0	<15	185	<5.0	<100	<100	<100
	8/21/2000	145.14	7.52	ND	137.62	<1.0	<5.0	<5.0	<15	165	<5.0	<100	<100	<100
	11/20/2000	145.14	6.91	ND	138.23	<5.0	<5.0	<5.0	<10	192	<5.0	<50	<50	<50
	5/20/2004	143.97	7.00	ND	136.97	<1.00	<3.0	<1.0	<6.0	388	<5.0	<100	<100	<100
	11/18/2004	143.97	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	591	<5.0	<100	<100	<100
	6/20/2005	143.97	6.79	ND	137.18	<1.00	<3.0	<1.0	<6.0	54.1	<5.0	<100	<100	<100
	6/20/2005 Dup	143.97	6.79	ND	137.18	<1.00	<3.0	<1.0	<6.0	68	<5.0	<100	<100	<100
	12/15/2005	143.97	5.08	ND	138.89	<1.00	<3.00	<1.00	<4.00	7.68	<5.00	<100	<100	<100
	12/15/2005 Dup	143.97	5.08	ND	138.89	<1.00	<3.0	<1.0	<4.0	10.1	<5.0	<100	<100	<100
	6/26/2006	143.97	5.01	ND	138.96	<1.00	<3.00	<1.00	<4.00	< 3.00	<5.00	<100	<100	<100
	6/26/2006 Dup	143.97	5.01	ND	138.96	<1.00	<3.00	<1.00	<4.00	< 3.00	<5.00	<100	<100	<100
	12/13/2006	143.97	6.65	ND	137.32	<1.00	<3.00	<1.00	<6.00	65.8	<5.00	<100	<100	<100
	12/13/2006 Dup	143.97	6.65	ND	137.32	<1.00	<3.00	<1.00	<6.00	65.3	<5.00	<100	<100	<100
	7/10/2007	143.97	7.31	ND	136.66	<1.00	<3.00	<1.00	<6.00	52.0	<5.00	<100	<100	<100
	7/10/2007 Dup	143.97	7.31	ND	136.66	<1.00	<3.00	<1.00	<6.00	46.9	<5.00	<100	<100	<100
	1/7/2008	143.97	6.65	ND	137.32	<1.00	<3.00	<1.00	<6.00	102.0	<5.00	<100	<100	<100
	1/7/2008 dup	143.97	6.65	ND	137.32	<1.00	<3.00	<1.00	<6.00	98.3	<5.00	<100	<100	<100
	6/19/2008	143.97	6.92	ND	137.05	<1.00	<3.00	<1.00	<4.00	47.7	<100	<100	<100	<100
	6/19/2008 Dup	143.97	6.92	ND	137.05	<1.00	<3.00	<1.00	<4.00	45.3	<100	<100	<100	<100
	1/14/2009	143.97	6.40	ND	137.57	<1.00	<3.00	<1.00	<6.00	18.6	<5.00	<100	<100	<100
	1/14/2009 dup	143.97	6.40	ND	137.57	<1.00	<3.00	<1.00	<6.00	18.9	<5.00	<100	<100	<100
	6/19/2009	143.97	5.92	ND	138.05	<1.00	<3.00	<1.00	<6.00	8.06	<5.00	<100	<100	<100
	6/19/2009 Dup	143.97	5.92	ND	138.05	<1.00	<3.00	<1.00	<6.00	5.68	<5.00	<100	<100	<100
	12/22/2009	143.97	6.37	ND	137.60	<1.00	<3.00	<1.00	<6.00	9.95	<5.00	<100	<100	<100
	12/22/2009 dup	143.97	6.37	ND	137.60	<1.00	<3.00	<1.00	<6.00	9.30	<5.00	<100	<100	<100
	6/11/2010	143.97	7.34	ND	136.63	<1.00	<3.00	<1.00	<6.00	18.9	<5.00	<100	<100	<100
	6/11/2010 Dup	143.97	7.34	ND	136.63	<1.00	<3.00	<1.00	<6.00	17.8	<5.00	<100	<100	<100
	6/28/2011	143.97	6.41	ND	137.56	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75.0	<25.0	<25.0
OW-L (GW-1,3) 3-16'	6/24/1999	144.28	6.40	ND	137.88	<1.0	<5	<5	<15	11.8	<5	<100	<100	<100
	11/4/1999	144.28	5.45	ND	138.83	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	1/3/2000	144.28	5.90	ND	138.38	<1.0	<5.0	<5.0	<15	5.7	<5.0	<100	<100	<100
	2/25/2000	144.28	4.05	ND	140.23	<1.0	<1.0	<1.0	<3	<1.0	NS	NS	NS	NS
	11/18/2004	143.14	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	6/20/2005	143.14	5.25	ND	137.89	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	12/15/2005	143.14	3.44	ND	139.70	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	6/26/2006	143.14	4.03	ND	139.11	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	7/10/2007	143.14	5.78	ND	137.36	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	1/7/2008	143.14	5.81	ND	137.33	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/19/2008	143.14	5.47	ND	137.67	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	1/14/2009	143.14	4.91	ND	138.23	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/19/2009	143.14	4.14	ND	139.00	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	12/22/2009	143.14	4.97	ND	138.17	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/11/2010	143.14	5.90	ND	137.24	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
OW-M (GW-1,3) 3-16'	6/24/1999	144.00	7.26	ND	136.74	<1.0	<5	<5	<15	7.5	<5	<100	<100	<100
	10/13/1999	144.00	16.64	ND	127.36	<1.0	<5.0	<5.0	<15	376	<5.0	<100	<100	<100
	11/4/1999	144.00	6.11	ND	137.89	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	4/14/2000	144.00	6.04	ND	137.96	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	8/21/2000	144.00	6.14	ND	137.86	<1.0	<5.0	<5.0	<15	15.2	<5.0	<100	<100	<100
	11/20/2000	144.00	6.03	ND	137.97	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	2/26/2001	144.00	5.57	ND	138.43	<1.0	<5.0	<5.0	<15	972	<5.0	680	<100	<100
	7/16/2001	144.00	6.21	ND	137.79	<5.0	<5.0	<5.0	<5.0	13.3	<5.0	<50	<50	<50
	1/22/2002	144.00	6.81	ND	137.19	<5.0	<5.0	<5.0	<10	18.1	<5.0	<50	<50	<50
	5/7/2002	144.00	5.92	ND	138.08	<5.0	<5.0	<5.0	<10	15.1	<5.0	<50	<50	<50
	6/20/2005	142.81	5.93	ND	136.88	<1.00	<3.00	<1.00	<6.0	11.4	< 5.0	<100	<100	<100
	6/26/2006	142.81	4.25	ND	138.56	<1.00	13.1	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	7/10/2007	142.81	6.35	ND	136.46	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	1/7/2008	142.81	5.72	ND	137.09	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/19/2008	142.81	5.82	ND	136.99	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	1/14/2009	142.81	5.20	ND	137.61	<1.00	<3.00	<1.00	<6.00	3.87	<5.00	<100	<100	<100
	6/19/2009	142.81	4.70	ND	138.11	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	12/22/2009	142.81	5.26	ND	137.55	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/10/2010	142.81	6.55	ND	136.26	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100

95-214880 Global Companies LLC Mobil Station No. 1436 309 Lowell Street Andover, MA		Table 2 Concentrations of Volatile Petroleum Hydrocarbons (VPH) Detected in Groundwater												
Well No. (GW Class) Screen Interval (ft.)	Sampling Date	Top of Casing Elevation (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	Ground Water Elevation (ft)	Benzene (µg/l)	Toluene (µg/l)	Ethyl- benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)	Naph- thalene (µg/l)	C ₅ -C ₈ Aliphatics (µg/l)	C ₉ -C ₁₂ Aliphatics (µg/l)	C ₉ -C ₁₀ Aromatics (µg/l)
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000
OW-N (GW-1,2,3) 12-20'	8/20/1999	150.65	13.00	ND	137.65	4.3	<5.0	5.8	<15	475	<5.0	<100	<100	<100
	11/4/1999	150.65	12.03	ND	138.62	<1.0	<5.0	<5.0	<15	5.7	<5.0	<100	<100	<100
	11/22/1999	150.65	12.33	ND	138.32	<1.0	<5.0	<5.0	<15	36.6	<5.0	<100	<100	<100
	1/3/2000	150.65	12.40	ND	138.25	<1.0	<5.0	<5.0	<15	73	<5.0	<100	<100	<100
	4/14/2000	150.65	12.03	ND	138.62	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	8/21/2000	150.65	12.53	ND	138.12	<1.0	<5.0	<5.0	<15	6.4	<5.0	<100	<100	<100
	11/20/2000	150.65	12.03	ND	138.62	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<100	<50
	2/26/2001	150.65	12.02	ND	138.63	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	7/16/2001	150.65	13.10	ND	137.55	<5.0	<5.0	<5.0	<10	173	<5.0	<50	<50	<50
	9/7/2001	150.65	13.51	ND	137.14	<5.0	<5.0	<5.0	<10	1,270	<5.0	<50	<50	<50
	1/22/2002	150.65	12.76	ND	137.89	<5.0	<5.0	<5.0	<10	11.5	<5.0	<50	<50	<50
	5/7/2002	150.65	11.74	ND	138.91	<5.0	<5.0	<5.0	<10	281	<5.0	<50	<50	<50
	10/2/2002	149.45	13.08	ND	136.37	<2.0	<2.0	<2.0	<4.0	131	<3.0	<50	<50	<50
	5/10/2003	149.45	11.42	ND	138.03	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS	NS
	11/13/2003	149.45	12.26	ND	137.19	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS
	5/20/2004	149.45	11.97	ND	137.48	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	6/2/2005	149.45	11.62	ND	137.83	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	12/15/2005	149.45	10.70	ND	138.75	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	6/26/2006	149.45	10.61	ND	138.84	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	7/10/2007	149.45	12.60	ND	136.85	<1.00	<3.00	<1.00	<6.00	3.02	<5.00	<100	<100	<100
	1/7/2007	149.45	11.73	ND	137.72	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/19/2008	149.45	12.20	ND	137.25	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	1/14/2009	149.45	11.61	ND	137.84	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/19/2009	149.45	11.50	ND	137.95	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	12/22/2009	149.45	11.65	ND	137.80	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/11/2010	149.45	12.41	ND	137.04	<1.00	<3.00	<1.00	<6.00	4.49	<5.00	<100	<100	<100
OW-O (GW-1,3) 12-22'	8/20/1999	148.84	17.67	ND	131.17	<1.0	<5.0	<5.0	<15	273	<5.0	<100	<100	<100
	11/4/1999	148.84	16.02	ND	132.82	<1.0	<5.0	<5.0	<15	314	<5.0	<100	<100	<100
	1/3/2000	148.84	16.56	ND	132.28	<1.0	<5.0	<5.0	<15	284	<5.0	<100	<100	<100
	4/14/2000	148.84	15.29	ND	133.55	<1.0	<5.0	<5.0	<15	202	<5.0	<100	<100	<100
	8/21/2000	148.84	16.87	ND	131.97	<1.0	<5.0	<5.0	<15	249	<5.0	<100	<100	<100
	11/20/2000	148.84	16.01	ND	132.83	<5.0	<5.0	<5.0	<5.0	54.5	<5.0	<50	<50	<50
	2/26/2001	148.84	7.04	ND	141.80	<1.0	<5.0	<5.0	<15	13.9	<5.0	<100	<100	<100
	7/16/2001	148.84	17.33	ND	131.51	<5.0	<5.0	<5.0	<10	343	<5.0	<50	<50	<50
	9/7/2001	148.84	17.98	ND	130.86	<5.0	<5.0	<5.0	<10	464	<5.0	<50	<50	<50
	1/22/2002	148.84	17.38	ND	131.46	<5.0	<5.0	<5.0	<10	556	<5.0	<50	<50	<50
	5/7/2002	148.84	15.35	ND	133.49	<5.0	<5.0	<5.0	6	324	<5.0	<50	<50	<50
	10/2/2002	144.58	17.62	ND	126.96	<2.0	<2.0	<2.0	<4.0	399	<3.0	<50	<50	<50
	5/10/2003	144.58	15.41	ND	129.17	<1.0	<1.0	<1.0	<1.0	176	NS	NS	NS	NS
	5/20/2004	144.58	15.34	ND	129.24	<1.00	<3.0	<1.0	<6.0	232	<5.0	<100	<100	<100
	11/18/2004	144.58	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	211	8.6	<100	<100	<100
	6/20/2005	144.58	15.46	ND	129.12	<1.00	<3.0	<1.0	<6.0	150	<5.0	<100	<100	<100
	12/15/2005	144.58	12.22	ND	132.36	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	6/26/2006	144.58	12.63	ND	131.95	<1.00	<3.00	<1.00	<4.00	4.57	<5.00	<100	<100	<100
	12/13/2006	144.58	14.71	ND	129.87	<1.00	<3.00	<1.00	<6.00	45.1	<5.00	<100	<100	<100
	7/10/2007	144.58	16.36	ND	128.22	<1.00	<3.00	<1.00	<6.00	37.0	<5.00	<100	<100	<100
	1/7/2008	144.58	15.62	ND	128.96	<1.00	<3.00	<1.00	<6.00	34.6	<5.00	<100	<100	<100
	6/19/2008	144.58	15.18	ND	129.40	<1.00	<3.00	<1.00	<4.00	28.8	<5.00	<100	<100	<100
	1/14/2009	144.58	14.27	ND	130.31	<1.00	<3.00	<1.00	<6.00	4.20	<5.00	<100	<100	<100
	6/19/2009	144.58	15.72	ND	128.86	<1.00	<3.00	<1.00	<6.00	15.30	<5.00	<100	<100	<100
	12/22/2009	144.58	14.48	ND	130.10	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/11/2010	144.58	16.75	ND	127.83	<1.00	<3.00	<1.00	<6.00	7.56	<5.00	<100	<100	<100
	6/28/2011	144.58	14.82	ND	129.76	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75.0	<25.0	<25.0

95-214880 Global Companies LLC Mobil Station No. 1436 309 Lowell Street Andover, MA		Table 2 Concentrations of Volatile Petroleum Hydrocarbons (VPH) Detected in Groundwater												
Well No. (GW Class) Screen Interval (ft.)	Sampling Date	Top of Casing Elevation (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	Ground Water Elevation (ft)	Benzene (µg/l)	Toluene (µg/l)	Ethyl- benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)	Naph- thalene (µg/l)	C ₅ -C ₈ Aliphatics (µg/l)	C ₉ -C ₁₂ Aliphatics (µg/l)	C ₉ -C ₁₀ Aromatics (µg/l)
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000
OW-P (GW-1,3) 12-22'	8/20/1999	148.60	15.70	ND	132.90	<1.0	<5.0	<5.0	<15	71.5	<5.0	<100	<100	<100
	10/13/1999	148.60	14.65	ND	133.95	<1.0	<5.0	<5.0	<15	82.7	<5.0	<100	<100	<100
	11/4/1999	148.60	14.09	ND	134.51	<1.0	<5.0	<5.0	<15	67.2	<5.0	<100	<100	<100
	1/3/2000	148.60	14.78	ND	133.82	<1.0	<5.0	<5.0	<15	66.1	<5.0	<100	<100	<100
	4/14/2000	148.60	13.24	ND	135.36	<1.0	<5.0	<5.0	<15	26.3	<5.0	<100	<100	<100
	11/20/2000	148.60	13.88	ND	134.72	<5.0	<5.0	<5.0	<10	5.5	<5.0	<50	<50	<50
	5/10/2003	144.36	13.08	ND	131.28	<2.0	<2.0	<2.0	<4.0	2.7	<3.0	<50	<50	<50
	5/20/2004	144.36	13.77	ND	130.59	<1.00	<3.0	<1.0	<6.0	9.1	<5.0	<100	<100	<100
	11/18/2004	144.36	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	6/20/2005	144.36	13.62	ND	130.74	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	12/15/2005	144.36	9.23	ND	135.13	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	6/26/2006	144.36	10.46	ND	133.90	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	7/10/2007	144.36	14.33	ND	130.03	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	1/7/2008	144.36	12.35	ND	132.01	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/19/2008	144.36	12.19	ND	132.17	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	1/14/2009	144.36	11.00	ND	133.36	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/19/2009	144.36	12.48	ND	131.88	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	12/22/2009	144.36	11.19	ND	133.17	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/11/2010	144.36	14.58	ND	129.78	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
OW-Q (GW-1,3) 2-12'	11/22/1999	146.91	7.85	ND	139.06	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	1/3/2000	146.91	9.30	ND	137.61	<1.0	<5.0	<5.0	<15	6.1	<5.0	<100	<100	<100
	4/14/2000	146.91	7.51	ND	139.40	<1.0	<5.0	<5.0	<15	62.3	<5.0	<100	<100	<100
	8/21/2000	146.91	8.99	ND	137.92	<1.0	<5.0	<5.0	<15	11.7	<5.0	<100	<100	<100
	11/20/2000	146.91	8.20	ND	138.71	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	2/26/2001	146.91	6.38	ND	140.53	<1.0	<5.0	<5.0	<15	15.1	<5.0	<100	<100	<100
	7/16/2001	146.91	7.02	ND	139.89	<5.0	<5.0	<5.0	<10	6.2	<5.0	<50	<50	<50
	1/22/2002	146.91	9.23	ND	137.68	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	5/7/2002	146.91	7.55	ND	139.36	<5.0	<5.0	<5.0	<10	5.2	<5.0	<50	<50	<50
	6/20/2005	142.68	6.04	ND	136.64	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	12/15/2005	142.68	3.73	ND	138.95	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	6/26/2006	142.68	5.09	ND	137.59	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	12/13/2006	142.68	5.67	ND	137.01	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	7/10/2007	142.68	6.18	ND	136.50	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	1/7/2008	142.68	5.83	ND	136.85	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/19/2008	142.68	5.80	ND	136.88	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	1/14/2009	142.68	5.55	ND	137.13	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/19/2009	142.68	5.01	ND	137.67	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	12/22/2009	142.68	5.53	ND	137.15	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/10/2010	142.68	8.88	ND	133.80	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
OW-R (GW-1,3) 8-18'	11/22/1999	140.23	8.52	ND	131.71	<1.0	<5.0	<5.0	<15	11	<5.0	<100	<100	<100
	1/3/2000	140.23	8.97	ND	131.26	<1.0	<5.0	<5.0	<15	35.6	<5.0	<100	<100	<100
	4/14/2000	140.23	7.01	ND	133.22	<1.0	<5.0	<5.0	<15	32.9	<5.0	<100	<100	<100
	8/21/2000	140.23	8.92	ND	131.31	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	2/26/2001	140.23	9.59	ND	130.64	<1.0	<5.0	<5.0	<15	19.7	<5.0	<100	<100	<100
	7/16/2001	140.23	10.11	ND	130.12	<5.0	<5.0	<5.0	<5.0	9.1	<5.0	<50	<50	<50
	1/22/2002	140.23	9.62	ND	130.61	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	5/7/2002	140.23	6.94	ND	133.29	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	10/2/2002	135.93	9.24	ND	126.69	<2.0	<2.0	<2.0	<4.0	<2.0	<3.0	<50	<50	<50
	5/20/2004	135.93	7.32	ND	128.61	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	11/18/2004	135.93	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	6/20/2005	135.93	7.15	ND	128.78	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
	6/26/2006	135.93	5.13	ND	130.80	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	12/13/2006	135.93	6.38	ND	129.55	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	7/10/2007	135.93	8.21	ND	127.72	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/19/2008	135.93	5.94	ND	129.99	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	1/14/2009	135.93	6.20	ND	129.73	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/19/2009	135.93	7.28	ND	128.65	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	12/23/2009	135.93	7.00	ND	128.93	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/10/2010	135.93	9.26	ND	126.67	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100

95-214880 Global Companies LLC Mobil Station No. 1436 309 Lowell Street Andover, MA		Table 2 Concentrations of Volatile Petroleum Hydrocarbons (VPH) Detected in Groundwater												
Well No. (GW Class) Screen Interval (ft.)	Sampling Date	Top of Casing Elevation (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	Ground Water Elevation (ft)	Benzene (µg/l)	Toluene (µg/l)	Ethyl- benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)	Naph- thalene (µg/l)	C ₃ -C ₈ Aliphatics (µg/l)	C ₉ -C ₁₂ Aliphatics (µg/l)	C ₉ -C ₁₀ Aromatics (µg/l)
MCP Method 1 Standards		GW-1				5	1,000	700	10,000	70	140	300	700	200
		GW-2				2,000	50,000	20,000	3,000	50,000	700	3,000	5,000	4,000
		GW-3				10,000	40,000	5,000	5,000	50,000	20,000	50,000	50,000	50,000
OW-S (GW-1,3) 12-22'	11/22/1999	140.29	15.04	ND	125.25	<5.0	<25	<25	<75	30	<25	<500	<500	<500
	1/3/2000	140.29	15.15	ND	125.14	<1.0	<5.0	<5.0	<15	10.9	<5.0	<100	<100	<100
	4/14/2000	140.29	14.23	ND	126.06	<1.0	<5.0	<5.0	<15	9.6	<5.0	<100	<100	<100
	8/21/2000	140.29	15.24	ND	125.05	<1.0	<5.0	<5.0	<15	5.7	<5.0	<100	<100	<100
	11/20/2000	140.29	8.45	ND	131.84	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	2/26/2001	140.29	15.43	ND	124.86	<1.0	<5.0	<5.0	<15	<5.0	<5.0	<100	<100	<100
	7/16/2001	140.29	15.75	ND	124.54	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	1/22/2002	140.29	15.69	ND	124.60	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	5/7/2002	140.29	14.56	ND	125.73	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<50	<50
	10/2/2002	136.01	15.78	ND	120.23	<2.0	<2.0	<2.0	<4.0	<2.0	<3.0	<50	<50	<50
	5/10/2003	136.01	14.44	ND	121.57	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS
	6/20/2005	136.01	NR	ND	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<100	<100	<100
	6/26/2006	136.01	12.02	ND	123.99	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	12/13/2006	136.01	13.89	ND	122.12	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	1/7/2008	136.01	14.77	ND	121.24	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/19/2008	136.01	14.45	ND	121.56	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	1/14/2009	136.01	13.57	ND	122.44	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/19/2009	136.01	14.56	ND	121.45	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	12/23/2009	136.01	14.00	ND	122.01	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/11/2010	136.01	14.95	ND	121.06	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/28/2011	136.01	14.34	ND	121.67	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<75.0	<25.0	<25.0
OW-T (GW-1,2,3) 9-19'	10/2/2002	142.90	14.96	ND	127.94	<2.0	<2.0	<2.0	<4.0	<2.0	<3.0	<50	<50	<50
	11/13/2003	142.90	14.52	ND	128.38	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS
OW-U (GW-1,2,3) 13-23'	10/2/2002	142.30	19.46	ND	122.84	<2.0	<2.0	<2.0	<4.0	87.8	<3.0	<50	<50	<50
	11/18/2002	142.30	19.04	ND	123.86	<2.0	<2.0	<2.0	<4.0	77.2	<3.0	<50	<50	<50
	11/13/2003	142.30	18.98	ND	123.32	<1.0	<1.0	<1.0	<1.0	52.6	NT	NT	NT	NT
	5/20/2004	142.30	18.80	ND	123.50	<1.00	<3.0	<1.0	<6.0	19.9	<5.0	<100	<100	<100
	6/20/2005	142.30	17.64	ND	124.66	<1.00	<3.0	<1.0	<6.0	4.3	<5.0	<100	<100	<100
	6/26/2006	142.30	14.87	ND	127.43	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	7/10/2007	142.30	18.55	ND	123.75	<1.00	<3.00	<1.00	<6.00	8.78	<5.00	<100	<100	<100
	1/7/2008	142.30	18.65	ND	123.65	<1.00	<3.00	<1.00	<6.00	20.8	<5.00	<100	<100	<100
	6/19/2008	142.30	18.29	ND	124.01	<1.00	<3.00	<1.00	<4.00	<3.00	<5.00	<100	<100	<100
	1/14/2009	142.30	16.95	ND	125.35	<1.00	<3.00	<1.00	<6.00	<3.00	<5.00	<100	<100	<100
	6/19/2009	142.30	18.23	ND	124.07	<1.00	<3.00	<1.00	<6.00	6.88	<5.00	<100	<100	<100
	12/23/2009	142.30	17.50	ND	124.80	<1.00	<3.00	<1.00	<6.00	11.1	<5.00	<100	<100	<100
	6/10/2010	142.30	18.67	ND	123.63	<1.00	<3.00	<1.00	<6.00	4.61	<5.00	<100	<100	<100
OW-ER (GW-1,3) Total depth = 7.15'	5/20/1998	Unknown	NG	NG	NA	<1.0	<1.0	<1.0	<3	3	NA	NA	NA	NA
	7/30/1998	Unknown	6.44	ND	NA	<1.0	<1.0	<1.0	<3	2	NA	NA	NA	NA
	9/11/1998	Unknown	7.13	ND	NA	<1.0	<1.0	<1.0	<3	4	NA	NA	NA	NA
	10/26/1998	Unknown	6.43	ND	NA	<1.0	<1.0	<1.0	<3	6	NA	NA	NA	NA
	11/13/1998	Unknown	6.39	ND	NA	<1.0	<1.0	<1.0	<3	7	NA	NA	NA	NA
	12/17/1998	Unknown	6.67	ND	NA	<1.0	<1.0	<1.0	<3	2	NA	NA	NA	NA
1/6/1999	Unknown	6.13	ND	NA	<1.0	<1.0	<1.0	<3	3	NA	NA	NA	NA	
AS-3 (GW-1,3) 17.5-20'	10/2/2002	147.13	9.97	ND	137.16	<2.0	<2.0	<2.0	<4.0	3.3	<3.0	<50	<50	<50
AS-6 (GW-1,3) 16.5-19'	10/2/2002	147.65	9.50	ND	138.15	80.3	135	544	2,397	3,930	172	<500	1,120	4,220
AS-9 (GW-1,3) 17.5-20'	7/30/1998	147.34	4.31	ND	143.03	17	<1.0	8	<3	600	NA	NA	NA	NA
	10/26/1998	147.34	7.30	ND	140.04	13	<1.0	2	<3	400	NA	NA	NA	NA
	11/13/1998	147.34	7.30	ND	140.04	8	<1.0	2	<3	210	NA	NA	NA	NA
	12/17/1998	147.34	7.60	ND	139.74	<20	<1.0	<1.0	<3	300	NA	NA	NA	NA
	1/6/1999	147.34	6.97	ND	140.37	<20	<1.0	<1.0	<3	570	NA	NA	NA	NA
	2/9/1999	147.34	6.65	ND	140.69	19	<1.0	48	<3	380	NA	NA	NA	NA
AS-10 (GW-1,3) 18.5-20'	10/2/2002	144.11	6.84	ND	137.27	<2.0	<2.0	<2.0	<4.0	7.1	<3.0	1,120	<50	<50
RW-2	6/2/2005	144.47	NG	NG	NA	<1.00	<3.0	10.6	16.8	63.7	5.6	<100	<100	154
RW-3A	6/2/2005	Unknown	NG	NG	NA	<1.00	<3.0	<1.0	<6.0	<3.0	<5.0	<100	<100	<100
RW-4	11/18/2004	Unknown	NG	NG	NA	<1.00	<3.0	1.7	4.5	22.9	<5.0	<100	<100	<100
RW-6	6/2/2005	Unknown	NG	NG	NA	2.8	7.1	47.6	83.9	300	13.5	238	<100	528
Notes: ug/L = Micrograms per liter NG = Not Gauged <= Values were less than laboratory detection limits. Bold values indicate that the analyte was detected at a concentration above Method 1 GW-1 standards. Italicized values indicate that the analyte was detected at a concentration above Method 1 GW-2 standards. Underlined values indicate that the analyte was detected at a concentration above Method 1 GW-3 standards. Comprehensive site survey including top of PVC well casing elevations was conducted in October 2002 by Hancock Survey Associates, Inc.													QA/QC INFO: LAST UPDATED BY: BB DATE: 6/16/2016 LAST CHECKED BY: MC DATE: 8/1/2016	

95-214880 Global Companies, LLC Mobil Station No. 1436 309 Lowell Street Andover, MA		Table 3 Geochemical and Monitored Natural Attenuation Data											
WELL ID	DATE	Field Temperature (°C)	Field Conductivity (µS/cm)	Field DO (mg/L)	Field pH (S.U.)	ORP (mV)	Ferrous Iron (mg/l)	Dissolved Iron (mg/L)	Dissolved Manganese (mg/L)	Nitrate (mg/L)	Sulfate (mg/L)	Methane (ug/L)	Total Alkalinity (mg/L as CaCO ₃)
MW -1	3/10/2003	8.09	872	0.15	6.25	179	NM	NM	NM	NM	NM	NM	NM
	5/3/2004	10.58	1,684	4.71	7.83	169.8	NM	NM	NM	NM	NM	NM	NM
	6/17/2004	14.38	1,563	2.24	5.86	174.3	0.0	NM	NM	0.6	14	NM	30
	6/28/2011	18.22	3,370	11.79	5.20	77.4	8.1	NM	NM	<0.100	33	NM	49
	3/26/2014	6.35	4,361	0.85	6.00	-39.9	NM	97.6	13.9	<0.100	21	422	NM
	6/30/2014	16.80	5.35	0.21	6.23	-43.7	NM	87	13	<0.050	26	2400	NM
	9/11/2014	19.29	4,709	0.69	6.02	-8.6	NM	52	7.7	<0.050	30	2000	NM
	12/8/2014	10.16	4,940	2.88	6.11	5.2	NM	100	18	<0.050	25	820	NM
	9/17/2015	22.00	5,060	0.01	6.13	-6.5	NM	55	6.9	<0.050	23	2800	NM
	12/16/2015	13.50	5,581	0.17	6.07	205.6	NM	77	12	<0.05	25	1400	NM
	3/8/2016	10.00	4,326	0.14	5.75	28.4	NM	46	6.8	<0.050	20	670	NM
	6/7/2016	12.43	2,956	1.95	6.08	-69.4	NM	64	10	<0.050	22	3300	NM
MW-2	3/10/2003	5.73	2,115	2.20	6.40	14.9	NM	NM	NM	NM	NM	NM	NM
	5/3/2004	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	6/17/2004	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	10/17/2007	18.81	1,372	0.46	6.79	-14.3	NM	NM	NM	NM	NM	NM	NM
	3/21/2008	7.99	4,522	1.34	7.20	-281.2	NM	NM	NM	NM	NM	NM	NM
	9/25/2008	19.45	2,701	0.11	6.30	-168.5	NM	NM	NM	NM	NM	NM	NM
	3/10/2009	8.13	2,770	0.61	6.44	-57.2	2.0	NM	NM	NM	NM	NM	NM
	9/17/2009	18.61	550	0.47	5.91	-162.9	NM	NM	NM	NM	NM	NM	NM
	4/21/2010	12.78	2,120	0.28	6.23	-171.2	NM	NM	NM	NM	NM	NM	NM
	9/30/2010	19.83	575	1.10	6.16	0.30	NM	NM	NM	<0.100	2.28	NM	93.3
	12/29/2010	9.16	5,513	2.41	6.07	28.30	0.6	NM	NM	<0.100	46.2	NM	47.1
	6/28/2011	17.37	19	0.13	6.08	-61.00	3.9	NM	NM	<0.100	<10.0	NM	79.6
	9/28/2011	20.81	1664	2.00	6.09	-58.30	2.2	3.24	0.259	<0.100	1.99	112	NM
	12/22/2011	12.15	1764	0.17	6.38	-21.60	NM	2.27	0.308	<0.100	15.2	14	NM
	3/8/2012	9.91	1744	0.60	6.47	-261.40	NM	0.464	0.289	0.57	20.6	7	NM
	6/20/2012	17.15	1264	0.44	6.89	-52.10	NM	1.58	0.18	0.14	16.6	24.8	NM
	9/10/2012	20.81	1395	0.11	6.13	-235.60	NM	2.08	0.225	<0.100	<10.0	117	NM
	12/12/2012	11.96	1892	0.23	6.77	-24.10	NM	0.878	0.404	<0.100	32	<2.20	NM
	3/27/2013	9.30	6814	0.15	6.45	88.20	NM	2.66	0.137	0.46	29.3	27	NM
	6/19/2013	17.0	1769	0.24	6.37	-130.70	NM	2.95	0.168	<0.100	4.84	516	NM
	12/16/2013	9.1	2310	0.47	6.39	113.70	NM	NM	NM	NM	NM	NM	NM
	3/26/2014	4.6	19	0.69	6.59	-127.30	NM	2.35	0.271	<0.100	70.5	455	NM
MW-2R	6/30/2014	15.40	2	0.17	5.84	47	NM	0.1	<0.010	2	36	<2.6	NM
	9/11/2014	18.37	2213	0.81	5.46	140.30	NM	NM	NM	NM	NM	NM	NM
	3/31/2015	8.5	2323	1.86	5.91	139.80	NM	<0.05	0.3	4	28	4	NM
	12/16/2015	13.2	2613	0.32	5.68	206.90	NM	NM	NM	NM	NM	NM	NM
	3/8/2016	9.8	2,782	1.45	5.33	167.60	NM	NM	NM	NM	NM	NM	NM
MW-2D	3/10/2003	8.35	439	0.73	6.86	78	NM	NM	NM	NM	NM	NM	NM
	5/3/2004	11.88	589	2.46	7.87	170.5	NM	NM	NM	NM	NM	NM	NM
	6/17/2004	13.47	536	0.12	6.50	110.7	0.0	NM	NM	2.0	ND	NM	85
MW-3	12/16/2015	13.30	1094	0.88	5.98	157.8	NM	NM	NM	NM	NM	NM	NM
	3/8/2016	12.00	1,122	0.29	5.73	58.1	NM	NM	NM	NM	NM	NM	NM
MW-4	9/28/2011	18.35	1302	1.66	6.08	157.1	1.6	3.48	0.603	0.16	19	13	NM
	12/22/2011	13.90	606	1.91	6.10	126.2	NM	<0.03	0.258	2.04	23.7	<2.20	NM
	3/8/2012	11.28	2551	0.37	5.97	-42.7	NM	0.326	0.256	0.46	21.5	<2.20	NM
	6/20/2012	16.29	1760	0.58	7.57	52.4	NM	0.774	0.668	0.74	23.8	<2.20	NM
	3/27/2013	9.86	2418	1.79	6.15	367.2	NM	0.474	0.647	<10.0	46.1	<2.20	NM
	12/16/2013	10.40	1110	0.54	6.32	54.9	NM	NM	NM	NM	NM	NM	NM
	12/16/2015	13.30	2394	0.21	6.19	189.2	NM	NM	NM	NM	NM	NM	NM
	3/8/2016	10.6	1,643	0.16	5.99	21.8	NM	NM	NM	NM	NM	NM	NM
MW-5D	3/10/2003	9.73	584	1.53	6.30	902	NM	NM	NM	NM	NM	NM	NM
	5/3/2004	12.46	949	9.10	7.90	176.2	NM	NM	NM	NM	NM	NM	NM
	6/17/2004	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW -5DD	3/10/2003	9.93	161	0.64	7.20	882	NM	NM	NM	NM	NM	NM	NM
	5/3/2004	11.73	286	5.08	7.92	173.6	NM	NM	NM	NM	NM	NM	NM
	6/17/2004	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
OW-5	10/17/2007	15.71	2,039	0.43	7.06	-43.9	NM	NM	NM	NM	NM	NM	NM
	1/7/2008	11.38	826	0.58	6.57	-57.5	1.4	NM	NM	12	11	NM	NM
	3/21/2008	6.82	678	0.22	7.28	-332.5	NM	NM	NM	NM	NM	NM	NM
	9/25/2008	15.56	2,344	0.22	6.29	-89.9	NM	NM	NM	NM	NM	NM	NM
	3/10/2009	7.67	444	0.79	7.06	53.4	0.0	NM	NM	NM	NM	NM	NM
	9/17/2009	14.25	1,573	0.77	6.59	43.6	NM	NM	NM	NM	NM	NM	NM
	4/21/2010	12.44	623	0.71	6.87	2.1	NM	NM	NM	NM	NM	NM	NM
OW-6	10/17/2007	13.32	1,144	0.36	6.40	16.7	NM	NM	NM	NM	NM	NM	NM
	3/21/2008	6.13	889	1.43	5.98	-266.8	NM	NM	NM	NM	NM	NM	NM
	9/25/2008	14.43	1,384	0.19	6.22	-94.9	NM	NM	NM	NM	NM	NM	NM
	3/10/2009	8.15	584	0.76	6.00	105.4	2.0	NM	NM	NM	NM	NM	NM
	9/17/2009	13.80	1,143	0.42	5.93	108.5	NM	NM	NM	NM	NM	NM	NM
	4/21/2010	13.10	631	1.04	5.84	183.9	NM	NM	NM	NM	NM	NM	NM

95-214880 Global Companies, LLC Mobil Station No. 1436 309 Lowell Street Andover, MA		Table 3 Geochemical and Monitored Natural Attenuation Data											
WELL ID	DATE	Field Temperature (°C)	Field Conductivity (µS/cm)	Field DO (mg/L)	Field pH (S.U.)	ORP (mV)	Ferrous Iron (mg/l)	Dissolved Iron (mg/L)	Dissolved Manganese (mg/L)	Nitrate (mg/L)	Sulfate (mg/L)	Methane (ug/L)	Total Alkalinity (mg/L as CaCO ₃)
OW-10	10/17/2007	14.60	1,229	0.49	7.04	-34.6	NM	NM	NM	NM	NM	NM	NM
	3/21/2008	6.81	680	2.90	7.14	-214.8	NM	NM	NM	NM	NM	NM	NM
	9/25/2008	14.90	1,588	0.18	6.12	-82.1	NM	NM	NM	NM	NM	NM	NM
	3/10/2009	9.27	423	2.37	7.02	88	0.0	NM	NM	NM	NM	NM	NM
	9/17/2009	13.41	798	4.42	6.66	74.4	NM	NM	NM	NM	NM	NM	NM
	4/21/2010	12.26	536	1.55	6.91	62.8	NM	NM	NM	NM	NM	NM	NM
	3/8/2012	12.01	734	3.27	6.88	-40.7	NM	<0.03	0.167	0.7	14.2	<2.20	NM
	6/20/2012	14.13	1196	0.60	7.44	5.2	NM	0.0796	0.667	0.11	20.1	19.8	NM
	9/10/2012	16.44	1143	0.21	6.76	-236.8	NM	9.18	1.23	<0.100	<5.0	105	NM
	12/12/2012	12.16	1339	2.26	6.72	45.8	NM	0.936	0.344	<0.100	30.3	<2.20	NM
	6/19/2013	13.4	823	0.45	6.98	271.0	NM	<0.03	0.0607	0.12	13.8	<2.20	NM
	12/16/2013	8.6	1600	2.50	6.08	134.0	NM	0.0515	0.0647	<0.100	28.7	<2.20	NM
	3/31/2015	8.1	547	4.65	7.23	154.3	NM	<0.05	<0.01	0.07	14	<2.6	NM
OW-12	9/30/2010	18.57	1,211	1.10	6.36	-25.7	NM	NM	NM	NM	NM	NM	NM
	12/29/2010	12.00	504	8.55	6.17	119.3	NM	NM	NM	NM	NM	NM	NM
	6/28/2011	18.79	2,006	9.29	5.84	61.4	2.6	NM	NM	0.1	12.0	NM	112
	9/28/2011	20.16	1,909	1.59	5.83	155.7	2	3.52	0.652	0.52	9.87	29	NM
	12/22/2011	13.66	1,595	0.46	6.13	10.2	NM	3.09	0.634	0.15	16.6	<2.2	NM
	3/8/2012	11.39	992	0.92	6.41	-164.3	NM	1.2	0.234	0.21	5.36	9	NM
	6/20/2012	17.20	1,353	0.57	7.89	-54.2	NM	5.01	0.708	<100	3.53	40.3	NM
	9/10/2012	18.37	722	0.27	6.28	-225.5	NM	<0.03	0.317	2.75	25.3	<2.20	NM
	12/12/2012	13.59	1,143	0.74	6.73	-225.5	NM	1.5	0.368	<0.100	13.6	4.7	NM
	3/27/2013	10.94	1,307	0.58	6.40	300.6	NM	2.25	0.578	1.53	25	<2.2	NM
	12/16/2013	10.80	1,360	0.52	6.19	85.9	NM	NM	NM	NM	NM	NM	NM
	6/30/2014	18.82	1,575	0.72	5.90	16.6	NM	4.5	1.8	<0.050	21	<2.6	NM
	9/11/2014	18.82	1,575	0.72	5.90	16.6	NM	NM	NM	NM	NM	NM	NM
	12/8/2014	08.81	1,592	1.77	6.47	0	NM	0.8	0.63	0.66	26	89	NM
	9/17/2015	22.00	1,765	0.01	6.18	43.7	NM	1.9	0.92	0.32	30	73	NM
	12/16/2015	13.40	1,965	0.72	6.29	204.9	NM	0.25	0.36	0.92	28	<2.6	NM
	3/8/2016	11.20	3,096	0.37	6.07	40.1	NM	0.47	0.68	1.0	25	130	NM
	6/7/2016	12.25	1,494	1.47	6.46	-32.4	NM	0.89	0.54	0.22	21	110	NM
OW-13	10/17/2007	17.80	935	0.52	6.63	57.1	NM	NM	NM	NM	NM	NM	NM
	3/21/2008	9.36	1,494	0.14	7.13	-294.2	NM	NM	NM	NM	NM	NM	NM
	9/25/2008	18.60	1,583	0.21	6.26	-109.4	NM	NM	NM	NM	NM	NM	NM
	3/10/2009	9.42	3,769	0.43	6.22	-18.3	4.0	NM	NM	NM	NM	NM	NM
	9/17/2009	17.39	1,063	0.45	5.89	55.7	NM	NM	NM	NM	NM	NM	NM
	4/21/2010	14.39	537	0.42	6.14	-110.2	NM	NM	NM	NM	NM	NM	NM
	9/30/2010	18.70	935	1.34	6.03	75.1	NM	NM	NM	0.970	23.2	NM	69.1
	12/29/2010	11.61	882	3.18	6.11	66.5	1.1	NM	NM	0.500	19.4	NM	103
	9/28/2011	20.14	988	1.27	5.98	158.4	2.2	2.76	0.518	0.440	6.99	81	NM
	12/22/2011	13.30	903	1.21	6.07	92.2	NM	0.171	0.777	0.780	19.6	0.777	NM
	3/8/2012	11.68	4135	0.20	6.23	-264.2	NM	5.78	0.468	<0.100	25	102	NM
	6/20/2012	16.95	1681	0.78	7.40	-10.9	NM	9.42	1.34	0.240	13.6	73	NM
	9/10/2012	19.91	1048	0.36	6.07	-221.3	NM	2.04	0.486	0.640	15.8	21.7	NM
	12/12/2012	13.53	1195	0.56	6.51	-27.9	NM	4.78	0.62	0.230	28.1	43.9	NM
	3/27/2013	11.40	3392	0.29	6.35	116.2	NM	22.7	2.46	0.490	16.6	82.2	NM
	6/19/2013	16.20	745	0.23	6.39	-98.2	NM	4.71	0.305	0.120	30.3	48	NM
	12/16/2013	11.00	1206	0.31	6.85	-30.1	NM	12.3	0.233	<0.100	1.26	19.6	NM
	9/11/2014	19.05	1296	1.00	5.57	77.9	NM	4.2	0.84	0.051	27	240	NM
	12/8/2014	9.97	1457	2.63	6.21	23.4	NM	4.6	0.76	<0.05	19	520	NM
	3/31/2015	9.80	1197	0.68	6.33	3.0	NM	13	1.5	<0.05	<2.0	960	NM
	9/17/2015	21.00	1545	0.01	5.92	75.2	NM	2.4	1	0.260	26	320	NM
	12/16/2015	13.40	1586	0.24	5.98	203.8	NM	3.1	0.84	0.074	24	520	NM
	3/8/2016	11.7	1,290	0.17	5.76	98.1	NM	2.9	0.67	<0.050	21	830	NM
	6/7/2016	13.5	0.763	2.26	5.99	-45.0	NM	4.4	0.94	0.190	15	1300	NM
OW-14	10/17/2007	16.58	1,279	0.98	5.92	34.9	NM	NM	NM	NM	NM	NM	NM
	3/21/2008	7.69	470	4.10	6.60	-206.7	NM	NM	NM	NM	NM	NM	NM
	9/25/2008	17.40	1,721	0.30	6.10	-80.0	NM	NM	NM	NM	NM	NM	NM
	3/10/2009	10.43	533	2.90	6.20	163.5	0.0	NM	NM	NM	NM	NM	NM
	9/17/2009	16.35	1,283	0.68	6.07	912	NM	NM	NM	NM	NM	NM	NM
	4/21/2010	13.68	1,164	5.54	5.77	210.1	NM	NM	NM	NM	NM	NM	NM
OW-B	3/10/2003	3.96	857	0.32	7.35	198	NM	NM	NM	NM	NM	NM	NM
	5/3/2004	9.97	1,415	2.09	7.92	163.5	NM	NM	NM	NM	NM	NM	NM
	6/17/2004	11.47	700	0.15	6.33	-63.9	4.65	NM	NM	ND	ND	NM	155
	10/17/2007	10.56	1,327	0.43	6.58	-19.6	NM	NM	NM	NM	NM	NM	NM
	3/21/2008	6.26	563	1.13	6.76	-274.8	NM	NM	NM	NM	NM	NM	NM
	9/25/2008	15.07	1,870	0.15	6.13	-88.4	NM	NM	NM	NM	NM	NM	NM
	3/10/2009	8.94	900	0.25	6.33	21.8	3.6	NM	NM	NM	NM	NM	NM
	9/17/2009	13.80	1,224	3.20	6.31	-32.7	NM	NM	NM	NM	NM	NM	NM
	4/21/2010	12.53	827	0.50	6.27	-6.5	NM	NM	NM	NM	NM	NM	NM
	12/29/2010	NM	NM	2.41	6.07	28.3	NM	NM	NM	NM	NM	NM	NM
	6/29/2011	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	3/26/2014	5.61	1642	0.46	6.31	-13.6	NM	4.17	0.549	<0.100	8.09	268	NM
	9/11/2014	16.07	1999	0.75	6.01	31.50	NM	6.5	0.92	<0.050	5	760	NM
OW-BD	3/10/2003	7.96	727	0.21	6.64	64.9	NM	NM	NM	NM	NM	NM	NM
	5/4/2004	10.78	1,603	0.79	8.00	164.4	NM	NM	NM	NM	NM	NM	NM
	6/17/2004	11.38	971	0.12	6.11	-62.7	4.8	NM	NM	ND	ND	NM	125
	1/4/2005	13.78	1,688	0.86	6.43	-74.3	5.0	NM	NM	0.8	6.0	NM	NM

95-214880 Global Companies, LLC Mobil Station No. 1436 309 Lowell Street Andover, MA		Table 3 Geochemical and Monitored Natural Attenuation Data											
WELL ID	DATE	Field Temperature (°C)	Field Conductivity (µS/cm)	Field DO (mg/L)	Field pH (S.U.)	ORP (mV)	Ferrous Iron (mg/l)	Dissolved Iron (mg/L)	Dissolved Manganese (mg/L)	Nitrate (mg/L)	Sulfate (mg/L)	Methane (ug/L)	Total Alkalinity (mg/L as CaCO ₃)
OW-ED	9/28/2011	16.42	905	1.46	6.33	266.7	0	0.0375	0.0666	<0.100	46.3	<2.20	NM
	12/22/2011	12.90	938	2.72	7.26	0.6	NM	<0.03	0.0113	<0.100	47.4	<2.20	NM
	9/10/2012	15.89	1,252	0.17	6.42	-237.9	NM	2.96	0.35	<0.100	<10.0	86.2	NM
	12/12/2012	12.85	955	5.84	7.53	9.6	NM	<0.03	<0.004	<0.100	49.7	<2.20	NM
	3/27/2013	12.26	994	3.75	7.68	5358.0	NM	<0.03	<0.004	0.12	46.9	<2.20	NM
	12/16/2013	9.90	980	5.88	7.70	110.5	NM	<0.03	<0.004	<0.100	39.8	<2.20	NM
	9/17/2015	15.30	914	0.17	7.37	24.4	NM	0.16	0.23	<0.050	35	4.9	NM
	12/16/2015	12.60	951	1.96	7.35	184.8	NM	0.34	0.37	<0.050	37	<2.6	NM
	3/8/2016	12.2	967	3.90	7.37	36.1	NM	<0.050	<0.010	5.8	31	<2.6	NM
	6/7/2016	9.8	1	2.05	7.01	65.3	NM	<0.050	0.012	<0.050	34	<2.6	NM
OW-G	9/30/2010	18.23	1,167	2.35	6.21	156.8	NM	NM	NM	NM	NM	NM	NM
	12/29/2010	11.29	660	10.16	6.29	119.5	NM	NM	NM	NM	NM	NM	NM
	6/28/2011	19.53	2,282	10.25	5.80	188.1	2.1	NM	NM	<0.100	24.3	NM	48.8
OW-I	1/4/2005	11.09	848	0.83	6.32	144.9	0.9	NM	NM	1.1	22.0	NM	NM
	5/6/2005	9.64	238	0.51	6.14	43.4	0.0	NM	NM	0.4	16.0	NM	NM
	8/1/2005	14.36	871	1.00	5.88	275.6	1.2	NM	NM	0.3	12.0	NM	NM
	12/8/2005	9	533	8.16	6.23	245.6	4.6	NM	NM	0.9	10.0	NM	NM
	2/2/2006	6.99	1,424	1.27	6.23	223.3	0.58	NM	NM	0.8	13.0	NM	NM
	5/26/2006	9.44	207	1.41	6.52	44.8	2.1	NM	NM	1.4	18.0	NM	NM
	9/1/2006	15.05	840	0.82	5.72	82.7	>3.0	NM	NM	0.4	11.0	NM	NM
	12/13/2006	11.37	628	0.25	6.86	76.4	2.0	NM	NM	8.7	11.0	NM	NM
	3/30/2007	6.96	306	0.25	6.00	14.8	1.4	NM	NM	1.0	1.0	NM	NM
OW-J	1/4/2005	9.77	872	2.26	6.58	145.6	0.8	NM	NM	0.9	9.0	NM	NM
	5/6/2005	10.5	409	2.69	6.58	23.7	0.0	NM	NM	0.0	10.0	NM	NM
	8/1/2005	16.39	978	1.00	6.08	280.6	1.4	NM	NM	0.5	4.0	NM	NM
	12/8/2005	8.77	340	7.32	6.96	209.5	0.5	NM	NM	0.9	3.0	NM	NM
	2/2/2006	6.32	408	2.23	6.87	172.4	0.66	NM	NM	12.0	4.0	NM	NM
	5/26/2006	10.04	93	1.30	6.97	105.1	0.8	NM	NM	12.0	8.0	NM	NM
	9/1/2006	15.69	310	0.48	6.57	4.7	1.96	NM	NM	1.1	19.0	NM	NM
	12/13/2006	10.99	348	0.50	7.15	56.8	0.6	NM	NM	5.7	5.0	NM	NM
	3/30/2007	5.51	179	5.38	6.76	402	0.0	NM	NM	12.0	2.0	NM	NM
	6/25/2007	11.56	393	0.11	6.72	-3052	0.35	NM	NM	6.1	28.0	NM	NM
	1/8/2008	9.29	478	1.15	6.66	23.3	0.2	NM	NM	1.3	23.0	NM	NM
	6/19/2008	13.02	710	0.17	6.43	94.9	1.0	NM	NM	1.1	29.0	NM	NM
	1/14/2009	7.44	378	0.90	7.44	10.3	0.8	NM	NM	1.7	23.0	NM	NM
	6/19/2009	11.58	511	0.27	6.54	70.8	1.0	NM	NM	2.8	26.0	NM	NM
	12/22/2009	3.69	506	2.18	6.38	48.4	1.71	NM	NM	1.3	10.0	NM	NM
	6/11/2010	11.40	632	0.10	6.36	-32.8	1.8	NM	NM	1.3	8.0	NM	NM
OW-K	7/13/2004	10.80	261	0.09	9.09	94.3	0.0	NM	NM	0.0	25.0	NM	NM
	1/4/2005	8.65	470	5.69	6.05	188.7	0.8	NM	NM	1.5	7.0	NM	NM
	5/6/2005	9.47	182	1.05	5.93	62.6	0.0	NM	NM	0.0	9.0	NM	NM
	8/1/2005	16.43	213	1.58	5.96	195.7	0.0	NM	NM	0.4	12.0	NM	NM
	12/8/2005	8.02	102	2.95	6.06	186.1	0.5	NM	NM	3.9	27.0	NM	NM
	2/2/2006	6.38	131	1.10	6.40	156.2	0.25	NM	NM	1.5	5.0	NM	NM
	5/26/2006	11.54	38	10.12	6.59	330.9	1.0	NM	NM	1.8	5.0	NM	NM
	9/1/2006	15.15	172	0.61	5.72	127.2	0.66	NM	NM	0.6	4.0	NM	NM
	12/13/2006	10.27	338	0.51	6.87	148.2	0.0	NM	NM	5.6	6.0	NM	NM
	3/30/2007	5.98	78	4.51	5.73	63.3	0.0	NM	NM	1.0	2.0	NM	NM
	6/25/2007	11.85	263	0.13	6.15	-219.7	0.58	NM	NM	10.0	13.0	NM	NM
	1/7/2008	8.41	467	0.93	6.03	51.9	0.4	NM	NM	1.1	4.0	NM	NM
	6/19/2008	11.66	255	0.36	6.08	114.5	0.5	NM	NM	12	5.0	NM	NM
	1/14/2009	7.40	146	1.58	7.03	20.9	0.0	NM	NM	2.1	2.0	NM	NM
	6/19/2009	11.48	125	2.09	6.06	146.4	0.0	NM	NM	3.0	10.0	NM	NM
	12/22/2009	8.05	204	2.05	5.68	176.3	0.35	NM	NM	1.3	8.0	NM	NM
	6/11/2010	11.55	308	0.16	6.14	0.8	0.2	NM	NM	1.3	4.0	NM	NM
	6/28/2011	12.88	211	2.46	5.51	277.1	0.0	NM	NM	3.6	7.9	NM	37.3
OW-L	7/13/2004	11.20	969	0.03	8.25	47.8	1.8	NM	NM	0.6	34.0	NM	NM
	1/4/2005	6.18	57	12.03	6.36	176.5	0.0	NM	NM	1.3	0.0	NM	NM
	5/6/2005	10.09	374	0.76	5.77	64.1	0.0	NM	NM	0.0	0.0	NM	NM
	8/1/2005	13.9	1025	3.00	5.93	199	3.2	NM	NM	0.0	52.0	NM	NM
	12/8/2005	6.78	626	4.10	6.50	92.1	3.0	NM	NM	12.0	4.0	NM	NM
	2/2/2006	6.33	1,444	0.06	6.44	210.4	2.05	NM	NM	12.0	3.0	NM	NM
	5/26/2006	14.41	234	0.94	6.71	-70.8	4.1	NM	NM	2.0	6.0	NM	NM
	9/1/2006	15.81	636	1.67	5.96	-0.1	73.0	NM	NM	0.8	5.0	NM	NM
	3/30/2007	6.11	61	3.32	6.01	44.9	0.0	NM	NM	22.0	14.0	NM	NM
	6/25/2007	12.97	1,441	0.24	6.37	-307.3	6.19	NM	NM	18.1	15.0	NM	NM
	1/7/2008	9	1,073	0.10	6.19	32.3	5.4	NM	NM	5.1	32.0	NM	NM
	6/19/2008	13.21	1,522	0.24	6.12	70.4	3.4	NM	NM	2.1	23.0	NM	NM
	1/14/2009	8.14	358	0.43	7.29	6.6	3.0	NM	NM	1.8	4.0	NM	NM
	6/19/2009	13.89	127	5.60	6.19	102.8	1.6	NM	NM	3.5	11.0	NM	NM
	12/22/2009	9.44	545	1.05	5.62	168.3	1.5	NM	NM	1.0	11.0	NM	NM
	6/11/2010	11.49	1,314	0.34	6.03	-72	3.0	NM	NM	2.3	13.0	NM	NM

95-214880 Global Companies, LLC Mobil Station No. 1436 309 Lowell Street Andover, MA		Table 3 Geochemical and Monitored Natural Attenuation Data											
WELL ID	DATE	Field Temperature (°C)	Field Conductivity (µS/cm)	Field DO (mg/L)	Field pH (S.U.)	ORP (mV)	Ferrous Iron (mg/l)	Dissolved Iron (mg/L)	Dissolved Manganese (mg/L)	Nitrate (mg/L)	Sulfate (mg/L)	Methane (ug/L)	Total Alkalinity (mg/L as CaCO ₃)
OW-M	7/13/2004	9.70	1,138	0.02	8.68	-7.1	2.4	NM	NM	0.9	19.0	NM	NM
	5/6/2005	10.45	215	1.36	6.05	19.4	2.4	NM	NM	0.0	0.0	NM	NM
OW-N	3/10/2003	7.27	392	1.06	6.55	207.2	NM	NM	NM	NM	NM	NM	NM
	5/4/2004	9.85	453	5.00	7.78	175.6	NM	NM	NM	NM	NM	NM	NM
	6/17/2004	12.85	647	0.76	6.45	77.7	0.4	NM	NM	2.8	52.0	NM	60
	5/6/2005	12.25	403	2.53	6.23	49	0.0	NM	NM	7.6	26.0	NM	NM
	8/1/2005	16.86	823	0.86	6.06	321.9	0.0	NM	NM	0.0	11.0	NM	NM
	12/8/2005	12.04	473	12.53	6.67	386.7	0.0	NM	NM	0.43	19.0	NM	NM
	2/2/2006	9.01	635	3.35	6.60	196.4	0.04	NM	NM	1.1	21.0	NM	NM
	5/26/2006	12.18	108	4.00	6.79	207.7	0.7	NM	NM	12	43.0	NM	NM
	9/1/2006	16.31	393	0.97	6.63	102.2	1.5	NM	NM	3.4	37.0	NM	NM
	3/30/2007	9.12	338	1.31	6.27	30.6	0.0	NM	NM	1.8	28.0	NM	NM
	6/25/2007	13.35	828	0.12	6.35	-279.3	0.13	NM	NM	7.5	29.0	NM	NM
	1/7/2008	11.79	522	1.08	6.72	16.6	0.0	NM	NM	1.5	26.0	NM	NM
	6/19/2008	13.73	726	0.16	6.29	100.5	1.0	NM	NM	1.5	30.0	NM	NM
	1/14/2009	9.68	298	1.50	7.73	4.0	1.0	NM	NM	12.0	2.3	NM	NM
	6/19/2009	14.24	893	1.19	6.33	154.0	0.0	NM	NM	1.8	6.0	NM	NM
	12/22/2009	11.55	758	1.53	6.23	177.0	0.0	NM	NM	1.0	6.0	NM	NM
	6/11/2010	12.89	1271	0.24	6.13	-5.4	1.6	NM	NM	4.7	18.0	NM	NM
OW-O	3/10/2003	9.54	700	1.07	6.32	56.6	NM	NM	NM	NM	NM	NM	NM
	5/4/2004	8.91	1,083	1.22	7.89	172.7	NM	NM	NM	NM	NM	NM	NM
	6/17/2004	10.65	571	0.29	6.25	35.6	3.8	NM	NM	0.4	18.0	NM	130
	7/13/2004	11.02	736	0.36	8.87	13	3.2	NM	NM	0.6	32.0	NM	NM
	1/4/2005	13.06	1,055	1.24	6.26	107.3	3.8	NM	NM	1.7	44.0	NM	NM
	5/6/2005	10.16	995	1.06	6.17	19.5	2.8	NM	NM	0	22.0	NM	NM
	8/1/2005	16.76	621	3.08	6.22	167.1	0.0	NM	NM	0.0	29.0	NM	NM
	12/8/2005	10.76	696	10.25	6.22	365.6	0.0	NM	NM	1.1	44.0	NM	NM
	2/2/2006	8.56	802	3.75	6.46	186.7	21.0	NM	NM	0.9	26.0	NM	NM
	5/26/2006	10.34	231	2.45	6.69	275.5	0.8	NM	NM	8.8	12.0	NM	NM
	9/1/2006	13.43	379	0.45	6.19	38.5	>3.0	NM	NM	0.8	20.0	NM	NM
	12/13/2006	11.82	904	1.56	7.09	-32	3.4	NM	NM	8.6	6.0	NM	NM
	3/30/2007	7.76	619	3.05	6.17	42.6	0.0	NM	NM	0.9	3.0	NM	NM
	6/25/2007	12.00	746	2.73	6.45	-179.1	0.64	NM	NM	72.0	16.0	NM	NM
	1/8/2008	10.93	1,607	0.19	6.63	-4.9	1.8	NM	NM	1.6	11.0	NM	NM
	6/19/2008	11.54	1,266	0.33	6.20	76.7	6.0	NM	NM	1.5	38.0	NM	NM
	1/14/2009	8.55	512	3.96	7.40	1.0	0.0	NM	NM	1.4	1.0	NM	NM
	6/16/2009	10.99	779	0.59	6.37	67.8	1.8	NM	NM	2.4	23.0	NM	NM
	12/22/2009	10.81	486	4.74	6.12	141.5	0.3	NM	NM	0.5	5.0	NM	NM
	6/11/2010	10.68	1,023	0.22	6.22	-33.4	3.2	NM	NM	1.6	8.0	NM	NM
OW-P	7/13/2004	10.65	437	1.36	8.83	472	1.1	NM	NM	0.1	31.0	NM	NM
	1/4/2005	112	672	5.04	6.24	239.4	0.6	NM	NM	0.4	7.0	NM	NM
	5/6/2005	10.52	602	2.88	5.80	70.3	0.0	NM	NM	0.7	11.0	NM	NM
	8/1/2005	17.37	1,278	3.51	5.90	322.9	0.0	NM	NM	0.3	13.0	NM	NM
	12/8/2005	9.60	349	7.20	6.05	367.6	0.0	NM	NM	3.1	39.0	NM	NM
	2/2/2006	7.43	761	1.19	6.45	170.1	0.31	NM	NM	0.7	9.0	NM	NM
	5/26/2006	10.03	175	4.41	6.52	401.1	0.6	NM	NM	0.8	12.0	NM	NM
	9/1/2006	14.92	653	2.49	5.69	202.9	0.04	NM	NM	0.5	0.0	NM	NM
	3/30/2007	6.64	292	2.07	5.59	63.3	0.0	NM	NM	0.9	0.0	NM	NM
	6/25/2007	11.91	981	1.07	5.77	-150.8	0.33	NM	NM	8.9	18.0	NM	NM
	1/7/2008	7.96	700	2.36	6.22	272	0.0	NM	NM	12	13.0	NM	NM
	6/19/2008	12.23	1,670	0.46	5.67	181.1	0.0	NM	NM	1.4	5.0	NM	NM
	1/14/2009	7.81	365	0.26	7.33	42	0.0	NM	NM	1.0	11.0	NM	NM
	6/19/2009	12.35	1,210	2.40	5.62	154.9	0.0	NM	NM	1.6	12.0	NM	NM
	12/22/2009	9.40	571	0.64	5.48	81.8	0.01	NM	NM	1.6	10.0	NM	NM
	6/11/2010	10.69	1,330	2.08	5.41	65.6	0.6	NM	NM	1.3	6.0	NM	NM
OW-Q	7/13/2004	10.20	1,691	0.23	8.52	120.8	0.0	NM	NM	0.7	26.0	NM	NM
	5/6/2005	9.95	1,977	1.74	5.18	107.3	0.1	NM	NM	0.0	17.0	NM	NM
	8/1/2005	16.64	6.06	0.94	5.64	300.2	0.0	NM	NM	0.0	15.0	NM	NM
	12/8/2005	7.69	436	4.66	5.71	362.3	0.0	NM	NM	1.6	11.0	NM	NM
	2/2/2006	4.80	2,379	0.12	6.16	215.0	2.18	NM	NM	1.5	9.0	NM	NM
	5/26/2006	12.70	231	1.66	6.26	253.2	1.4	NM	NM	0.9	10.0	NM	NM
	9/1/2006	19.32	261	0.43	5.93	85.3	0.25	NM	NM	0.8	14.0	NM	NM
	3/30/2007	4.55	860	1.05	5.65	26.7	2.7	NM	NM	0.9	33.0	NM	NM
	6/25/2007	14.18	1,003	0.20	6.07	-180.4	2.53	NM	NM	32.0	12.0	NM	NM
	1/7/2008	6.94	3,194	0.13	6.09	24.6	3.6	NM	NM	27.0	1.0	NM	NM

95-214880 Global Companies, LLC Mobil Station No. 1436 309 Lowell Street Andover, MA		Table 3 Geochemical and Monitored Natural Attenuation Data											
WELL ID	DATE	Field Temperature (°C)	Field Conductivity (µS/cm)	Field DO (mg/L)	Field pH (S.U.)	ORP (mV)	Ferrous Iron (mg/l)	Dissolved Iron (mg/L)	Dissolved Manganese (mg/L)	Nitrate (mg/L)	Sulfate (mg/L)	Methane (ug/L)	Total Alkalinity (mg/L as CaCO ₃)
OW-R	7/13/2004	10.24	1,343	1.42	8.18	174.5	0.4	NM	NM	0.8	27.0	NM	NM
	1/4/2005	12.52	1,495	2.63	5.71	219.8	0.0	NM	NM	1.4	10.0	NM	NM
	5/6/2005	10.25	1,697	1.79	5.58	89.1	0.0	NM	NM	0.4	16.0	NM	NM
	8/1/2005	15.64	498	0.90	5.91	290.1	0.0	NM	NM	0.5	8.0	NM	NM
	12/8/2005	10.36	573	8.70	6.03	342.7	0.0	NM	NM	0.7	6.0	NM	NM
	2/2/2006	5.80	2,294	2.42	6.56	201.5	0.03	NM	NM	1.0	17.0	NM	NM
	5/26/2006	10.85	180	2.09	6.26	348.1	0.9	NM	NM	2.6	15.0	NM	NM
	9/1/2006	18.68	212	0.63	6.23	121.8	0.09	NM	NM	0.6	28.0	NM	NM
	12/13/2006	11.82	462	1.56	7.09	-32	3.4	NM	NM	8.6	6.0	NM	NM
	3/30/2007	7.54	913	1.18	5.69	60.9	0.0	NM	NM	1.0	23.0	NM	NM
	6/25/2007	13.11	849	0.17	6.03	-150.1	26.0	NM	NM	9.8	10.0	NM	NM
	1/7/2008	Could not Locate due to Snow Cover											
OW-S	3/10/2003	10.12	464	3.99	6.13	91.5	NM	NM	NM	NM	NM	NM	NM
	5/4/2004	NL	NL	NL	NL	NL	NL	NM	NM	NL	NL	NM	NL
	6/17/2004	NL	NL	NL	NL	NL	NL	NM	NM	NL	NL	NM	NL
	5/6/2005	DRY											
	8/1/2005	DRY											
	12/8/2005	10.53	382	14.97	6.03	388.4	0.0	NM	NM	1.0	8.0	NM	NM
	2/2/2006	6.40	1,105	7.20	8.04	154.4	0.01	NM	NM	1.4	7.0	NM	NM
	5/26/2006	9.81	120	11.66	6.34	352.4	0.7	NM	NM	0.7	22.0	NM	NM
	12/13/2006	12.27	523	2.09	6.70	143.5	0.0	NM	NM	82	14.0	NM	NM
	3/30/2007	10.34	305	2.40	5.79	59.1	0.0	NM	NM	0.7	10.0	NM	NM
	6/25/2007	11.56	612	0.62	6.04	65.3	0.36	NM	NM	0.8	14.0	NM	NM
	1/7/2008	11.38	826	0.58	6.57	-57.5	1.4	NM	NM	1.0	27.0	NM	NM
	6/19/2008	11.02	880	0.63	5.17	216.6	0.0	NM	NM	0.7	5.0	NM	NM
	1/14/2009	10.53	535	1.82	7.46	2.7	0.0	NM	NM	1.6	12.0	NM	NM
	6/19/2009	11.88	1,024	0.90	5.73	122.8	0.0	NM	NM	1.5	14.0	NM	NM
	12/23/2009	10.88	698	0.95	5.72	102.3	0.0	NM	NM	1.3	12.0	NM	NM
	6/11/2010	10.83	962	0.90	5.63	57.4	0.0	NM	NM	0.9	4.0	NM	NM
	6/28/2011	14.00	875	5.43	5.52	275.1	0.0	NM	NM	1.5	13.1	NM	18.4
OW- U	7/13/2004	11.02	922	4.29	8.29	129.4	0.0	NM	NM	0.9	8.0	NM	NM
	6/25/2007	13.00	336	3.12	5.81	121.3	27	NM	NM	8.7	17.0	NM	NM
	6/25/2007	13.00	336	3.12	5.81	121.3	27	NM	NM	8.7	17.0	NM	NM
Notes: °C = Degrees Celsius. mg/L = Micrograms per Liter (ppb). µS/cm = MicroSiemens per centimeter. mV = MilliVolts. mg/l= Milligrams per Liter. NM = Not Measured. NR = Not Recorded. NL= Not Located Field = Measured in the field utilizing a Horiba Water Analyzer.													QA/QC INFO: LAST UPDATED BY: BB DATE: 6/16/16 LAST CHECKED BY: MC DATE: 8/1/16

95-214880 Global Companies LLC Mobil Station No. 1436 309 Lowell Street Andover MA	Table 4 Lines of Evidence for MNA June 2016 Groundwater Sampling								
	Well Location	DO	ORP	pH	Dissolved Iron	Dissolved Manganese	Methane	Nitrate	Sulfate
	Upgradient Area	High	High	Neutral	Low	Low	Low	High	High
	Target Area	Low	Low	Low	High	High	High	Low	Low
	Outside Target Area	High	High	Neutral	Low	Low	Low	High	High
	Aerobic Trends			Anaerobic Trends					
Well Location	DO	ORP	pH	Dissolved Iron	Dissolved Manganese	Methane	Nitrate	Sulfate	
Outside Target Area (OW-12)	1.47	-32.4	6.46	0.89	0.54	110	0.22	21	
Target Area (OW-13)	2.26	-45	5.99	4.4	0.94	1,300	0.19	15	
Downgradient Area (OW-ED)	2.05	65.3	7.01	<0.050	0.012	<2.6	<0.050	34	
Conclusion	+/-	-	+	+	+/-	+	+/-	+	
Notes: + indicates natural attenuation is occurring based on monitoring result - indicates natural attenuation is not occurring based on monitoring result +/- indicates natural attenuation is inconclusive by monitoring results McAllister, P.M., and Chiang, C.Y. 1994. A Practical Approach to Evaluating Natural Attenuation of Contaminants in Ground Water . GWMR Spring 1994: 161-173. NA=Not analyzed									

Table 5
Public Involvement Plan Mailing List
Global Companies, LLC
309 Lowell Street (Station #1436)
Andover, Massachusetts
ECS Project No. 95-214880

Party	Business	Street Address	City/Town	8/2016 Mailings Status
The Andover Townsman	Town of Andover	Editorial Department - 33 Chestnut Street	Andover, MA 01810	mailed
Andover Board of Health	Town of Andover	36 Bartlet Street	Andover, MA 01810	mailed
Andover Board of Selectmen	Town of Andover	36 Bartlet Street	Andover, MA 01810	mailed
Conservation Law Foundation	N/A	62 Summer Street	Boston, MA 02108	mailed
Mr. Mark Curtin	N/A	67 Abbot Street	Andover, MA 01810	mailed
Department of Community	Town of Andover	36 Bartlet Street	Andover, MA 01810	mailed
Mr. and Mrs. Frank Firicano	N/A	110 Abbot Street	Andover, MA 01810	mailed
Ms. Kaija Gilmore	N/A	83 Elm Street	Andover, MA 01810	mailed
Mr. Donald Cooper	Andover Conservation Commission	36 Bartlet Street	Andover, MA 01810	mailed
Mr. Ronald Hill	N/A	15 Abbot Street	Andover, MA 01810	mailed
Lawrence Eagle Tribune	News Room	P.O. Box 100	Lawrence, MA 01842	mailed
Mr. Scott Matsumoto	N/A	15 Windemere Drive	Andover, MA 01810	mailed
Merrimack River Watershed Council	N/A	60 Island Street #2	Lawrence, MA 01842	mailed
Merrimack Valley Planning Commission	N/A	160 Main Street	Haverhill, MA 01830	mailed
Mr. James Paul	Lowell Street Investments	1 Washington St., Suite 400	Wellesley, MA 02481	mailed
Mr. Jack Petkus	Andover Department of Public Works	Water Treatment Plant, 397 Lowell Street	Andover, MA 01810	mailed
Mr. Robert Pursell	N/A	86 Porter Road	Andover, MA 01810	mailed
Mr. Robert Douglas	Andover Conservation Commission	36 Bartlet Street	Andover, MA 01810	mailed
Residents	N/A	3 Nab Hill Circle	Andover, MA 01810	mailed
Mr. and Mrs. Thomas Richardson	N/A	23 Greenwood Road	Andover, MA 01810	mailed
Ms. Karen Stromberg	MassDEP	One Winter Street	Boston, MA 02108	mailed
Deputy Assistant Commissioner, BWSC	MassDEP	One Winter Street	Boston, MA 02108	mailed

Notes:

NDAAUTF Not deliverable as addressed; unable to forward
RTS Returned to sender
RMNFA Recipient moved and left no forwarding address

ATTACHMENT I

**CONCEPTUAL SITE MODEL
MOBIL STATION #1436
309 LOWELL STREET, ANDOVER, MA
MASSDEP RTN 3-3072**

The Site consists of a 0.51 acre parcel located within a commercially zoned area of Andover. According to previous environmental reports prepared by Applied Geosystems, Inc., Groundwater and Environmental Services, Inc. (GES) and Camp, Dresser and McKee, Inc. (CDM), as well as available historical topographic maps and aerial photographs, the Site was first developed as a gasoline filling station circa 1959. Prior to 1959, the property was reportedly part of a dairy farm operation. The area surrounding the Site consists of both commercial businesses and residential properties. The Site is currently improved with a single-story, slab-on-grade construction building improved with a Dunkin Donuts and a convenience store. The Site is serviced by underground municipal water and sanitary sewer utilities as well as overhead electric and communication utilities.

Prior to 1986, the Site was utilized as an automotive repair facility and retail gasoline station.. In 1989 the service bays were remodeled and the building was converted to a convenience store. Former Site features associated with the use of the Site as an automotive repair facility included a former 500-gallon waste oil UST (reportedly removed from the Site in 1987), two hydraulic lifts, floor drains, an oil/water separator, a drywell and a former 550-gallon fuel oil UST (reportedly removed from the Site in 1989).

Sensitive receptors located in the vicinity of the Site include an intermittent stream which flows along the northern boundary of the Site and is a tributary to Fish Brook. Fish Brook discharges into Haggets Pond. The Site is also located within the boundaries of a Zone A Surface Water Supply Protection Area associated with Haggets Pond, which supplies drinking water to the City of Andover. The Haggets Pond surface water intake is located approximately 0.75 miles southwest of the Site. The nearest public water supply (PWS) well is located approximately 1.5 miles to the southeast of the Site. The Site is not located within the boundaries of a Zone II Area, an IWPA or a PPA. According to previous environmental reports, there are no private drinking water supply wells located within 500 ft of the Site. Depth to groundwater beneath the Site has historically been observed at depths ranging from 3 to 13 ft bgs and groundwater has been historically calculated to flow in a north-northeasterly direction beneath the Site.

Potential human receptors present at the Site under current Disposal Site conditions include adult Site workers, adult and child Site visitors/patrons, adult and child trespassers/passersby and adult utility workers. Under potential future Disposal Site conditions, potential human receptors that may be present at the Site include all of the above as well as potential future adult and child residents and adult construction workers.

Due to the Site's location within the boundaries of a Zone A Surface Water Supply Protection Area, MCP Method 1 Risk Characterization Groundwater Category GW-1 applies to all groundwater located beneath the Site. Additionally, due to the average annual depth to groundwater being less than 15 ft bgs, MCP Groundwater Category GW-2 also applies to all groundwater located within 30 ft of an occupied structure at the Site. Lastly, MCP Groundwater Category GW-3 applies to all groundwater in the Commonwealth of Massachusetts. For soil, MCP Category S-1 applies to all soil located between the ground surface and 3 ft bgs in unpaved areas of the Site and MCP Soil Category S-2 applies to all soil located between 3 and 15 ft bgs beneath paved surface at the Site. Soil located greater than 15 ft bgs or beneath permanent structures at the Site is classified as MCP Category S-3 soil.

The property first became a MassDEP listed Site following the discovery of petroleum impacted soil and groundwater during the removal of a 550-gallon fuel oil UST in November 1989. The contaminants identified were characterized as being related to weathered gasoline. Various environmental reports and remedial response actions have been conducted at the Site since 1989. Remedial response actions conducted at the Site during that timeframe are summarized below:

- Excavation and disposal of approximately 30 yds³ of petroleum impacted soil in November 1989 during former fuel oil UST excavation activities (MassDEP RTN 3-3072);
- Operation of a groundwater recovery, AS, and SVE system at the Site (January 1991 – March 2007);
- Completion of IRA activities associated for MassDEP RTN 3-13955 in August of 1996, associated with a release of gasoline from a malfunctioning gasoline UST flex connector (RTN was subsequently linked to RTN 3-3072);
- Completion of IRA activities associated with a SRM condition identified at the Site in May 1998 following the detection of MTBE in a surface water sample collected from the stream located to the north and downgradient of the Site (IRA activities were conducted under MassDEP RTN 3-3072);
- Completion of IRA activities associated with the detection of greater than 0.5 inches of LNAPL in monitoring well MW-2 in September 2001. IRA activities were conducted under MassDEP RTN 3-21062 and included hand bailing of LNAPL and an evaluation of potential LNAPL migration pathways (RTN 3-21062 was subsequently linked to RTN 3-3072);
- September through November 2001 – LNAPL hand-bailing activities were conducted at the Site under an IRA for MassDEP RTN 3-21062;
- Excavation and disposal of approximately 160 yds³ of petroleum impacted soil in September 2005 under a RAM during the completion of UST system upgrade activities;
- Excavation and disposal of approximately 756 tons of petroleum impacted soil, the extraction, treatment and subsequent discharge of approximately 60,700 gallons of groundwater, and the extraction and disposal of approximately 9,000 gallons of groundwater during the completion of UST removal and replacement activities in April 2014; and,
- Performance of an ongoing MNA program under ROS, which includes semi-annual groundwater sampling for VPH and MNA parameters as well as semi-annual surface water sampling (discontinued in June 2012).

The source of Site petroleum hydrocarbon contamination at the Site is attributed to a release of an unknown quantity of gasoline associated with the historical use of the Site as a gasoline filling station. Impacted soil was identified during the excavation and removal of a former 1,000-gallon fuel oil UST at the Site in 1989. Subsequent subsurface investigation activities have indicated that the highest concentrations of petroleum hydrocarbons impacts detected in soil appear to be located immediately down gradient of the current gasoline UST and fuel dispenser systems. Additionally, soil impacts have been observed at depths ranging from approximately 4 to 9 ft bgs in the vicinity of the former fuel oil UST that was located near the southeastern corner of the on-site building.

Historically, dissolved-phase VPH constituents have been detected in groundwater samples collected from both on- and off-site groundwater monitoring wells. Historically, the highest concentrations of dissolved-phase contaminants are located in the vicinity of groundwater monitoring wells OW-13 and MW-2. The furthest historical downgradient detection of VPH constituents (MTBE) has been in downgradient, off-site monitoring well OW-S, located approximately 750 ft from the source area. During the most recent groundwater sampling event completed in June 2016, dissolved-phase VPH target constituents were not detected at concentrations greater than their applicable MCP Method 1 GW-1 groundwater standards in any of the groundwater monitoring wells sampled with the exception of OW-13.

Additionally, with the exception of one groundwater sample collected from monitoring well OW-K in January 2008, no groundwater samples collected from any on or off-site monitoring wells have exhibited concentrations of MTBE greater than the MCP Method 1 GW-1 Groundwater Standard for that parameter since at least December 2006.

The Disposal Site boundaries encompass portions of the source property as well as impacted downgradient/cross gradient parcels 151-13, 1151-4, 151-14A, and 151-14B, as identified on the town of Andover tax map #151 and Figure 3. These parcels are occupied by an undeveloped residential property (parcel 13), a golf course and driving range (parcel 14), an apartment complex (parcel 14A), and an athletic club (parcel 14B).

**TIMELINE: KEY REGULATORY DATES
MASSDEP RTN 3-3072 AND
RELATED RTNS 3-13955, 3-21062, AND 3-22521**

November 1989	Gasoline related petroleum constituents detected in soil and groundwater during UST removal.
January 1990	Phase I Limited Site Investigation completed by Applied Geosystems, Inc. MassDEP RTN 3-3072 assigned to the Site at that time.
October 1993	Site classified as a Tier II Disposal Site.
June 29, 2006	IRA activities initiated following a release of gasoline from a gasoline UST flex connector. RTN 3-13955 assigned to the release condition at that time.
March 23, 1998	IRA Completion Report submitted to the MassDEP by GES for RTN 3-13955, which was linked to RTN 3-3072 at that time.
May 1998	SRM condition reported to the MassDEP following the detection of MTBE in surface water samples collected from downgradient of the Site. Subsequent IRA activities were conducted at the Site under RTN 3-3072.
September 2001	MassDEP RTN 3-21062 issued to the Site following notification of the detection of greater than 0.5 inches of LNAPL in monitoring well MW-2. IRA activities were conducted which including hand bailing of LNAPL and an evaluation of potential LNAPL migration pathways.
November 2001	An IRA Completion report for RTN 3-21062 was filed with the MassDEP, at which time RTN 3-21062 was linked to RTN 3-3072.
September 2002	PCBs were detected in a soil sample collected from a depth range of 6 to 8 ft bgs at a concentration exceeding the MCP RCS-1 Reportable Concentration for that parameter during the performance of subsurface investigation activities. The PCB detection was subsequently reported to the MassDEP in January 2003 and the MassDEP issued RTN 3-22521 to the condition at that time.
July 2003	MassDEP RTN 3-22521 linked to RTN 3-3072.
October 2003	Phase II Comprehensive Site Assessment submitted to MassDEP by GES.
December 2003	Notice of Noncompliance (NON) issued to Exxon Mobil for failure to submit a Phase III RAP, Phase IV RIP, and a RAO. The NON required a RAO or Phase III/Phase IV/ROS Opinion be submitted to the MassDEP on or before September 1, 2004. CDM becomes the consultant of record for the Site.
February 2004	Tier II Extension filed by CDM to continue response actions at the Site.
March 2004	Phase III RAP submitted to the MassDEP by CDM.

August 2004	A Phase IV RIP, an IRA Completion Statement (treatment system was previously operated as an IRA), and a ROS Opinion were submitted to MassDEP by CDM.
March 30, 2007	The groundwater recovery/AS/SVE treatment system is shut down and the MNA program is implemented at the Site under ROS.
September 2010	Global Companies LLC acquires property, and ECS becomes the consultant of record for the Disposal Site.
April 7, 2014	ECS submitted a RAM Plan for the proposed Site upgrade activities which included the excavation and removal of three gasoline USTs and installation of two new USTs in their place and the replacement of one of the fuel dispensers.
April 2014	A 72-hour reportable condition was encountered when greater than 100 ppm TOVs was detected in soil samples collected in the immediate vicinity of the on-site USTs during UST removal and replacement activities. RTN 3-32096 was assigned to the condition.
April 2014	During the completion of the UST removal and soil excavation activities, a total of 756 tons of petroleum-impacted soil was transported off-site to Aggregate Recycling Corporation (ARC) of Eliot, ME. During excavation activities, a total of 60,700 gallons of groundwater was extracted from the UST grave, treated, and discharged to the municipal sewer system. Additionally, approximately 9,000-gallons of water was transported off-site to Newstream for disposal.
July 2014	RTN 3-32096 was linked to RTN 3-3072 with the submittal of an IRA Completion Report.

ATTACHMENT II

Abbreviations and Acronyms

ACEC	Area of Critical Environmental Concern
ACO	Administrative Consent Order
AOC	Area of Concern
AWQC	Ambient Water Quality Criteria
APH	Air Petroleum Hydrocarbon
AS	Air Sparge
AST	Aboveground Storage Tank
ASTM	American Society for Testing and Materials
AUL	Activity and Use Limitation
BOL	Bill of Lading
BOH	Board of Health
bgs	Below Ground Surface
BTEX	Benzene, Toluene, Ethylbenzene, Xylene
BWSC	Bureau of Waste Site Cleanup
CAM	Compendium of Analytical Methods
CEP	Critical Exposure Pathway
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CMR	Code of Massachusetts Regulations
COC	Contaminants of Concern
CSA	Comprehensive Site Assessment
CSM	Conceptual Site Model
DNAPL	Dense Non-Aqueous Phase Liquid
DO	Dissolved Oxygen
DOT	Department of Transportation
DPS	Downgradient Property Status
DWSA	Drinking Water Source Area
ECS	Environmental Compliance Services, Inc.
EFR	Enhanced Fluid Extraction
ELCR	Excess Lifetime Cancer Risk
EPA	Environmental Protection Agency
EPC	Exposure Point Concentration
EPH	Extractable Petroleum Hydrocarbons, MADEP Method 04-1.1
ESA	Environmental Site Assessment
EW	Extraction Well
FIR	Final Inspection Report
frac tank	fractionation tank
ft	Foot
GAC	Granular Activated Carbon
GC/FID	Gas Chromatogram/Flame Ionization Detector
GIS	Global Information System
GPR	Ground Penetrating Radar
GWA	Groundwater Analytical, Inc.
GWTS	Groundwater Treatment System
GW-1, GW-2, GW-3	MCP Method 1 Groundwater Categories
HI	Hazard Index
hp	Horsepower
in. HG	inches of mercury
IRA	Immediate Response Action
ISCO	In Situ Chemical Oxidation
IW	Injection Well
IWPA	Interim Wellhead Protection Area
LEL	Lower Explosive Limit
LEP	Licensed Environmental Professional
LGAC	Liquid-Phase Granular Activated Carbon
LNAPL	Light Non-Aqueous Phase Liquid
LRA	Limited Removal Action
LSI	Limited Subsurface Investigation
LSP	Licensed Site Professional
MassDEP	Massachusetts Department of Environmental Protection
MBAS	Methyl Blue Active Substance
MCP	Massachusetts Contingency Plan
MDL	Method Detection Limit
M.G.L.c. 21E	Massachusetts General Law, chapter 21E
mg/L	milligrams per liter
MNA	Monitored Natural Attenuation
Mod	Modification
MPE	Multi-Phase Extraction
MSR&L	Material Shipping Record and Log

Abbreviations and Acronyms

MtBE	Methyl Tertiary Butyl Ether
MW	Monitoring Well
ND	Non-detect
NHESP	National Heritage & Endangered Species Program
NON	Notice of Noncompliance
NOR	Notice of Responsibility
NPDES	National Pollutant Discharge Elimination System
NRS	Numerical Ranking System
OHM	Oil and Hazardous Materials
OMM	Operation, Maintenance and/or Monitoring
Ondrick	Ted Ondrick Company, LLC
ORP	Oxidation-Reduction Potential
OSHA	Occupational Safety and Health Administration
PAH	Polynuclear Aromatic Hydrocarbon
PCB	Polychlorinated biphenyl
PEL	Permissible Exposure Limit
PDWW	Private Drinking Water Well
Phase I	Phase I Initial Site Investigation
Phase I ESA	Phase I Environmental Site Assessment
Phase II	Phase II Comprehensive Site Assessment
Phase II ESA	Phase II Environmental Site Assessment
Phase III	Phase III Identification, Evaluation and Selection of Comprehensive Remedial Action Alternatives
Phase IV	Phase IV – Implementation of Selected Remedial Action Alternative
PID	Photoionization Detector
POET	Point of Entry Treatment
POTW	Publically Owned Treatment Works
PPA	Potentially Productive Aquifer
ppb	Parts-per-Billion
ppm	Parts-per-Million
ppm(v)	Parts per million (by volume)
RAA	Remedial Action Alternative
RAM	Release Abatement Measure
RAO	Response Action Outcome
RAP	Remedial Action Plan
RC	Risk Characterization
RCGW-1, RCGW-2 RCS-1, RCS-	Reportable Concentration Groundwater/Soil Categories
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Condition
RGP	Remedial General Permit
RIP	Remedy Implementation Plan
RMR	Remedial Monitoring Report
RLF	Release Log Form
RNF	Release Notification Form
ROS	Remedy Operation Status
ROS Report	Phase V Inspection and Monitoring Report in Support of ROS
RTN	Release Tracking Number
RW	Recovery Well
Scfm	Standard cubic feet per minute
S-1, S-2, S-3	MCP Method 1 Soil Categories
SOP	Standard Operating Procedures
SOW	Scope-of-Work
Spectrum	Spectrum Analytical, Inc., Agawam, MA
SRM	Substantial Release Migration
SVE	Soil Vapor Extraction
SVOC	Semi Volatile Organic Compound
SWQG	Surface Water Quality Guidance
TOC	Total Organic Carbon
TOVs	Total Organic Vapors
TPH	Total Petroleum Hydrocarbons
UCL	Upper Concentration Limit
ug/L	micrograms per liter
USEPA	United States Environmental Protection Agency
USGS	United States Geologic Survey
UST	Underground Storage Tank
Vactor	High Vacuum Extractor
VGAC	Vapor-Phase Granular Activated Carbon
VOC	Volatile Organic Compound
VPH	Volatile Petroleum Hydrocarbons, MADEP Method 04-1.1

ATTACHMENT III

March 18, 2016

Nicole Callahan
ECS - Woburn, MA
10 State Street
Woburn, MA 01801

Project Location: 309 Lowell St., Andover, MA
Client Job Number:
Project Number: 95-214880
Laboratory Work Order Number: 16C0395

Enclosed are results of analyses for samples received by the laboratory on March 9, 2016. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "James Georgantas". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

James M. Georgantas
Project Manager

Table of Contents

Sample Summary	3
Case Narrative	4
Sample Results	5
16C0395-01	5
16C0395-02	9
16C0395-03	10
16C0395-04	11
16C0395-05	12
16C0395-06	16
16C0395-07	20
Sample Preparation Information	24
QC Data	25
Petroleum Hydrocarbons Analyses - VPH	25
B143949	25
Miscellaneous Organic Analyses	27
B144548	27
Metals Analyses (Dissolved)	28
B143982	28
Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)	29
B144195	29
B144309	29
Flag/Qualifier Summary	30
Certifications	31
Chain of Custody/Sample Receipt	32

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ECS - Woburn, MA
10 State Street
Woburn, MA 01801
ATTN: Nicole Callahan

REPORT DATE: 3/18/2016

PURCHASE ORDER NUMBER: Global

PROJECT NUMBER: 95-214880

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 16C0395

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 309 Lowell St., Andover, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-1	16C0395-01	Ground Water		3810-RSK175 ASTM D516-07 MADEP-VPH-04-1.1 SM 21-22 4500 NO3 F SW-846 6010C/D	
MW-2R	16C0395-02	Ground Water		MADEP-VPH-04-1.1	
MW-3	16C0395-03	Ground Water		MADEP-VPH-04-1.1	
MW-4	16C0395-04	Ground Water		MADEP-VPH-04-1.1	
OW-12	16C0395-05	Ground Water		3810-RSK175 ASTM D516-07 MADEP-VPH-04-1.1 SM 21-22 4500 NO3 F SW-846 6010C/D	
OW-13	16C0395-06	Ground Water		3810-RSK175 ASTM D516-07 MADEP-VPH-04-1.1 SM 21-22 4500 NO3 F SW-846 6010C/D	
OW-ED	16C0395-07	Ground Water		3810-RSK175 ASTM D516-07 MADEP-VPH-04-1.1 SM 21-22 4500 NO3 F SW-846 6010C/D	

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

MADEP-VPH-04-1.1

No significant modifications were made to the method. All VPH samples were received preserved properly at pH <2 in the proper containers as specified on the chain-of-custody form unless specified in this narrative.

SW-846 6010C/D SW-846 6020A/B

For NC, Metals methods SW-846 6010D and SW-846 6020B are followed, and for all other states methods SW-846 6010C and SW-846 6020A are followed.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

A handwritten signature in black ink, appearing to read "Lisa Worthington", is written over a light gray rectangular background.

Lisa A. Worthington
Project Manager

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St., Andover, MA

Sample Description:

Work Order: 16C0395

Date Received: 3/9/2016

Field Sample #: MW-1

Sampled: 3/8/2016 15:15

Sample ID: 16C0395-01

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 21:39	EEH
C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 21:39	EEH
Unadjusted C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 21:39	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 21:39	EEH
C9-C10 Aromatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 21:39	EEH
Benzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 21:39	EEH
Ethylbenzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 21:39	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 21:39	EEH
Naphthalene	ND	5.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 21:39	EEH
Toluene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 21:39	EEH
m+p Xylene	ND	2.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 21:39	EEH
o-Xylene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 21:39	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2,5-Dibromotoluene (FID)	107	70-130							
2,5-Dibromotoluene (PID)	105	70-130							

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St., Andover, MA

Sample Description:

Work Order: 16C0395

Date Received: 3/9/2016

Field Sample #: MW-1

Sampled: 3/8/2016 15:15

Sample ID: 16C0395-01

Sample Matrix: Ground Water

Miscellaneous Organic Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methane	0.67	0.0026	mg/L	1		3810-RSK175	3/17/16	3/17/16 15:37	TPH

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Project Location: 309 Lowell St., Andover, MA

Sample Description:

Work Order: 16C0395

Date Received: 3/9/2016

Field Sample #: MW-1

Sampled: 3/8/2016 15:15

Sample ID: 16C0395-01

Sample Matrix: Ground Water

Metals Analyses (Dissolved)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Iron	46	0.050	mg/L	1		SW-846 6010C/D	3/10/16	3/15/16 16:17	AME
Manganese	6.8	0.010	mg/L	1		SW-846 6010C/D	3/10/16	3/15/16 16:17	AME

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Project Location: 309 Lowell St., Andover, MA

Sample Description:

Work Order: 16C0395

Date Received: 3/9/2016

Field Sample #: MW-1

Sampled: 3/8/2016 15:15

Sample ID: 16C0395-01

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Nitrate as N	ND	0.050	mg/L	1		SM 21-22 4500 NO3 F	3/15/16	3/15/16 17:00	AG
Sulfate	20	2.0	mg/L	1		ASTM D516-07	3/14/16	3/14/16 10:30	MMH

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Project Location: 309 Lowell St., Andover, MA

Sample Description:

Work Order: 16C0395

Date Received: 3/9/2016

Field Sample #: MW-2R

Sampled: 3/8/2016 09:45

Sample ID: 16C0395-02

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 22:15	EEH
C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 22:15	EEH
Unadjusted C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 22:15	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 22:15	EEH
C9-C10 Aromatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 22:15	EEH
Benzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 22:15	EEH
Ethylbenzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 22:15	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 22:15	EEH
Naphthalene	ND	5.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 22:15	EEH
Toluene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 22:15	EEH
m+p Xylene	ND	2.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 22:15	EEH
o-Xylene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 22:15	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2,5-Dibromotoluene (FID)	125	70-130							
2,5-Dibromotoluene (PID)	119	70-130							

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Project Location: 309 Lowell St., Andover, MA

Sample Description:

Work Order: 16C0395

Date Received: 3/9/2016

Field Sample #: MW-3

Sampled: 3/8/2016 12:20

Sample ID: 16C0395-03

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 22:51	EEH
C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 22:51	EEH
Unadjusted C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 22:51	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 22:51	EEH
C9-C10 Aromatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 22:51	EEH
Benzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 22:51	EEH
Ethylbenzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 22:51	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 22:51	EEH
Naphthalene	ND	5.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 22:51	EEH
Toluene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 22:51	EEH
m+p Xylene	ND	2.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 22:51	EEH
o-Xylene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 22:51	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2,5-Dibromotoluene (FID)	122	70-130							
2,5-Dibromotoluene (PID)	117	70-130							

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St., Andover, MA

Sample Description:

Work Order: 16C0395

Date Received: 3/9/2016

Field Sample #: MW-4

Sampled: 3/8/2016 11:15

Sample ID: 16C0395-04

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 23:27	EEH
C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 23:27	EEH
Unadjusted C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 23:27	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 23:27	EEH
C9-C10 Aromatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 23:27	EEH
Benzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 23:27	EEH
Ethylbenzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 23:27	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 23:27	EEH
Naphthalene	ND	5.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 23:27	EEH
Toluene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 23:27	EEH
m+p Xylene	ND	2.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 23:27	EEH
o-Xylene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/10/16 23:27	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2,5-Dibromotoluene (FID)	112	70-130							
2,5-Dibromotoluene (PID)	104	70-130							

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St., Andover, MA

Sample Description:

Work Order: 16C0395

Date Received: 3/9/2016

Field Sample #: OW-12

Sampled: 3/8/2016 13:25

Sample ID: 16C0395-05

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 0:03	EEH
C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 0:03	EEH
Unadjusted C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 0:03	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 0:03	EEH
C9-C10 Aromatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 0:03	EEH
Benzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 0:03	EEH
Ethylbenzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 0:03	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 0:03	EEH
Naphthalene	ND	5.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 0:03	EEH
Toluene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 0:03	EEH
m+p Xylene	ND	2.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 0:03	EEH
o-Xylene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 0:03	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2,5-Dibromotoluene (FID)	111	70-130							
2,5-Dibromotoluene (PID)	108	70-130							

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St., Andover, MA

Sample Description:

Work Order: 16C0395

Date Received: 3/9/2016

Field Sample #: OW-12

Sampled: 3/8/2016 13:25

Sample ID: 16C0395-05

Sample Matrix: Ground Water

Miscellaneous Organic Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methane	0.13	0.0026	mg/L	1		3810-RSK175	3/17/16	3/17/16 16:08	TPH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St., Andover, MA

Sample Description:

Work Order: 16C0395

Date Received: 3/9/2016

Field Sample #: OW-12

Sampled: 3/8/2016 13:25

Sample ID: 16C0395-05

Sample Matrix: Ground Water

Metals Analyses (Dissolved)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Iron	0.47	0.050	mg/L	1		SW-846 6010C/D	3/10/16	3/15/16 16:23	AME
Manganese	0.68	0.010	mg/L	1		SW-846 6010C/D	3/10/16	3/15/16 16:23	AME

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St., Andover, MA

Sample Description:

Work Order: 16C0395

Date Received: 3/9/2016

Field Sample #: OW-12

Sampled: 3/8/2016 13:25

Sample ID: 16C0395-05

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Nitrate as N	1.0	0.050	mg/L	1		SM 21-22 4500 NO3 F	3/15/16	3/15/16 17:00	AG
Sulfate	25	2.0	mg/L	1		ASTM D516-07	3/14/16	3/14/16 10:30	MMH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St., Andover, MA

Sample Description:

Work Order: 16C0395

Date Received: 3/9/2016

Field Sample #: OW-13

Sampled: 3/8/2016 10:25

Sample ID: 16C0395-06

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	230	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 0:39	EEH
C5-C8 Aliphatics	230	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 0:39	EEH
Unadjusted C9-C12 Aliphatics	550	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 0:39	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 0:39	EEH
C9-C10 Aromatics	670	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 0:39	EEH
Benzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 0:39	EEH
Ethylbenzene	15	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 0:39	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 0:39	EEH
Naphthalene	6.8	5.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 0:39	EEH
Toluene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 0:39	EEH
m+p Xylene	21	2.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 0:39	EEH
o-Xylene	2.4	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 0:39	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2,5-Dibromotoluene (FID)	128	70-130							
2,5-Dibromotoluene (PID)	121	70-130							

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St., Andover, MA

Sample Description:

Work Order: 16C0395

Date Received: 3/9/2016

Field Sample #: OW-13

Sampled: 3/8/2016 10:25

Sample ID: 16C0395-06

Sample Matrix: Ground Water

Miscellaneous Organic Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methane	0.83	0.0026	mg/L	1		3810-RSK175	3/17/16	3/17/16 16:25	TPH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St., Andover, MA

Sample Description:

Work Order: 16C0395

Date Received: 3/9/2016

Field Sample #: OW-13

Sampled: 3/8/2016 10:25

Sample ID: 16C0395-06

Sample Matrix: Ground Water

Metals Analyses (Dissolved)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Iron	2.9	0.050	mg/L	1		SW-846 6010C/D	3/10/16	3/15/16 16:28	AME
Manganese	0.67	0.010	mg/L	1		SW-846 6010C/D	3/10/16	3/15/16 16:28	AME

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St., Andover, MA

Sample Description:

Work Order: 16C0395

Date Received: 3/9/2016

Field Sample #: OW-13

Sampled: 3/8/2016 10:25

Sample ID: 16C0395-06

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Nitrate as N	ND	0.050	mg/L	1		SM 21-22 4500 NO3 F	3/15/16	3/15/16 17:00	AG
Sulfate	21	2.0	mg/L	1		ASTM D516-07	3/14/16	3/14/16 10:30	MMH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St., Andover, MA

Sample Description:

Work Order: 16C0395

Date Received: 3/9/2016

Field Sample #: OW-ED

Sampled: 3/8/2016 14:25

Sample ID: 16C0395-07

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 1:15	EEH
C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 1:15	EEH
Unadjusted C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 1:15	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 1:15	EEH
C9-C10 Aromatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 1:15	EEH
Benzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 1:15	EEH
Ethylbenzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 1:15	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 1:15	EEH
Naphthalene	ND	5.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 1:15	EEH
Toluene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 1:15	EEH
m+p Xylene	ND	2.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 1:15	EEH
o-Xylene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	3/10/16	3/11/16 1:15	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2,5-Dibromotoluene (FID)	128	70-130						3/11/16 1:15	
2,5-Dibromotoluene (PID)	121	70-130						3/11/16 1:15	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St., Andover, MA

Sample Description:

Work Order: 16C0395

Date Received: 3/9/2016

Field Sample #: OW-ED

Sampled: 3/8/2016 14:25

Sample ID: 16C0395-07

Sample Matrix: Ground Water

Miscellaneous Organic Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methane	ND	0.0026	mg/L	1		3810-RSK175	3/17/16	3/17/16 16:43	TPH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St., Andover, MA

Sample Description:

Work Order: 16C0395

Date Received: 3/9/2016

Field Sample #: OW-ED

Sampled: 3/8/2016 14:25

Sample ID: 16C0395-07

Sample Matrix: Ground Water

Metals Analyses (Dissolved)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Iron	ND	0.050	mg/L	1		SW-846 6010C/D	3/10/16	3/15/16 16:32	AME
Manganese	ND	0.010	mg/L	1		SW-846 6010C/D	3/10/16	3/15/16 16:32	AME

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St., Andover, MA

Sample Description:

Work Order: 16C0395

Date Received: 3/9/2016

Field Sample #: OW-ED

Sampled: 3/8/2016 14:25

Sample ID: 16C0395-07

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Nitrate as N	5.8	0.050	mg/L	1		SM 21-22 4500 NO3 F	3/15/16	3/15/16 17:00	AG
Sulfate	31	2.0	mg/L	1		ASTM D516-07	3/14/16	3/14/16 10:30	MMH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data**3810-RSK175**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
16C0395-01 [MW-1]	B144548	1.00	1.00	03/17/16
16C0395-05 [OW-12]	B144548	1.00	1.00	03/17/16
16C0395-06 [OW-13]	B144548	1.00	1.00	03/17/16
16C0395-07 [OW-ED]	B144548	1.00	1.00	03/17/16

ASTM D516-07

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
16C0395-01 [MW-1]	B144195	100	100	03/14/16
16C0395-05 [OW-12]	B144195	100	100	03/14/16
16C0395-06 [OW-13]	B144195	100	100	03/14/16
16C0395-07 [OW-ED]	B144195	100	100	03/14/16

Prep Method: MA VPH-MADEP-VPH-04-1.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
16C0395-01 [MW-1]	B143949	5	5.00	03/10/16
16C0395-02 [MW-2R]	B143949	5	5.00	03/10/16
16C0395-03 [MW-3]	B143949	5	5.00	03/10/16
16C0395-04 [MW-4]	B143949	5	5.00	03/10/16
16C0395-05 [OW-12]	B143949	5	5.00	03/10/16
16C0395-06 [OW-13]	B143949	5	5.00	03/10/16
16C0395-07 [OW-ED]	B143949	5	5.00	03/10/16

SM 21-22 4500 NO3 F

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
16C0395-01 [MW-1]	B144309	25.0	25.0	03/15/16
16C0395-05 [OW-12]	B144309	25.0	25.0	03/15/16
16C0395-06 [OW-13]	B144309	25.0	25.0	03/15/16
16C0395-07 [OW-ED]	B144309	25.0	25.0	03/15/16

Prep Method: SW-846 3005A Dissolved-SW-846 6010C/D

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
16C0395-01 [MW-1]	B143982	50.0	50.0	03/10/16
16C0395-05 [OW-12]	B143982	50.0	50.0	03/10/16
16C0395-06 [OW-13]	B143982	50.0	50.0	03/10/16
16C0395-07 [OW-ED]	B143982	50.0	50.0	03/10/16

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Petroleum Hydrocarbons Analyses - VPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B143949 - MA VPH										
Blank (B143949-BLK1)										
Prepared & Analyzed: 03/10/16										
Unadjusted C5-C8 Aliphatics	ND	100	µg/L							
C5-C8 Aliphatics	ND	100	µg/L							
Unadjusted C9-C12 Aliphatics	ND	100	µg/L							
C9-C12 Aliphatics	ND	100	µg/L							
C9-C10 Aromatics	ND	100	µg/L							
Benzene	ND	1.0	µg/L							
Butylcyclohexane	ND	1.0	µg/L							
Decane	ND	1.0	µg/L							
Ethylbenzene	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
2-Methylpentane	ND	1.0	µg/L							
Naphthalene	ND	5.0	µg/L							
Nonane	ND	1.0	µg/L							
Pentane	ND	1.0	µg/L							
Toluene	ND	1.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
2,2,4-Trimethylpentane	ND	1.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 2,5-Dibromotoluene (FID)	46.3		µg/L	40.0		116	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	44.7		µg/L	40.0		112	70-130			
LCS (B143949-BS1)										
Prepared & Analyzed: 03/10/16										
Benzene	84.9	1.0	µg/L	100		84.9	70-130			
Butylcyclohexane	92.7	1.0	µg/L	100		92.7	70-130			
Decane	103	1.0	µg/L	100		103	70-130			
Ethylbenzene	88.5	1.0	µg/L	100		88.5	70-130			
Methyl tert-Butyl Ether (MTBE)	102	1.0	µg/L	100		102	70-130			
2-Methylpentane	98.4	1.0	µg/L	100		98.4	70-130			
Naphthalene	96.5	5.0	µg/L	100		96.5	70-130			
Nonane	98.3	1.0	µg/L	100		98.3	30-130			
Pentane	75.3	1.0	µg/L	100		75.3	70-130			
Toluene	88.9	1.0	µg/L	100		88.9	70-130			
1,2,4-Trimethylbenzene	84.6	1.0	µg/L	100		84.6	70-130			
2,2,4-Trimethylpentane	94.1	1.0	µg/L	100		94.1	70-130			
m+p Xylene	172	2.0	µg/L	200		85.8	70-130			
o-Xylene	84.2	1.0	µg/L	100		84.2	70-130			
Surrogate: 2,5-Dibromotoluene (FID)	51.6		µg/L	40.0		129	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	51.8		µg/L	40.0		130	70-130			
LCS Dup (B143949-BS1)										
Prepared & Analyzed: 03/10/16										
Benzene	86.9	1.0	µg/L	100		86.9	70-130	2.35	25	
Butylcyclohexane	93.2	1.0	µg/L	100		93.2	70-130	0.566	25	
Decane	105	1.0	µg/L	100		105	70-130	2.07	25	
Ethylbenzene	90.6	1.0	µg/L	100		90.6	70-130	2.39	25	
Methyl tert-Butyl Ether (MTBE)	101	1.0	µg/L	100		101	70-130	1.11	25	
2-Methylpentane	101	1.0	µg/L	100		101	70-130	3.09	25	
Naphthalene	95.0	5.0	µg/L	100		95.0	70-130	1.58	25	
Nonane	99.7	1.0	µg/L	100		99.7	30-130	1.43	25	
Pentane	79.0	1.0	µg/L	100		79.0	70-130	4.84	25	
Toluene	91.2	1.0	µg/L	100		91.2	70-130	2.49	25	
1,2,4-Trimethylbenzene	84.6	1.0	µg/L	100		84.6	70-130	0.00355	25	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Petroleum Hydrocarbons Analyses - VPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B143949 - MA VPH
LCS Dup (B143949-BSD1)

Prepared & Analyzed: 03/10/16

2,2,4-Trimethylpentane	97.8	1.0	µg/L	100		97.8	70-130	3.90	25	
m+p Xylene	177	2.0	µg/L	200		88.7	70-130	3.30	25	
o-Xylene	86.9	1.0	µg/L	100		86.9	70-130	3.15	25	
Surrogate: 2,5-Dibromotoluene (FID)	51.5		µg/L	40.0		129	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	49.6		µg/L	40.0		124	70-130			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Miscellaneous Organic Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B144548 - 3810-RSK175										
Blank (B144548-BLK1)				Prepared & Analyzed: 03/17/16						
Methane	ND	0.0026	mg/L							
LCS (B144548-BS1)				Prepared & Analyzed: 03/17/16						
Methane	2000		mg/L	2000		97.6	56-121			
Duplicate (B144548-DUP1)				Prepared & Analyzed: 03/17/16						
		Source: 16C0395-01								
Methane	0.623	0.0026	mg/L		0.667			6.88		

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Metals Analyses (Dissolved) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B143982 - SW-846 3005A Dissolved										
Blank (B143982-BLK1)				Prepared: 03/10/16 Analyzed: 03/15/16						
Iron	ND	0.050	mg/L							
Manganese	ND	0.010	mg/L							
LCS (B143982-BS1)				Prepared: 03/10/16 Analyzed: 03/15/16						
Iron	0.480	0.050	mg/L	0.500		95.9	80-120			
Manganese	0.486	0.010	mg/L	0.500		97.1	80-120			
LCS Dup (B143982-BSD1)				Prepared: 03/10/16 Analyzed: 03/15/16						
Iron	0.481	0.050	mg/L	0.500		96.2	80-120	0.267	20	
Manganese	0.486	0.010	mg/L	0.500		97.3	80-120	0.155	20	

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QUALITY CONTROL
Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B144195 - ASTM D516-07										
Blank (B144195-BLK1)				Prepared & Analyzed: 03/14/16						
Sulfate	ND	2.0	mg/L							
LCS (B144195-BS1)				Prepared & Analyzed: 03/14/16						
Sulfate	20	2.0	mg/L	20.0		98.7	83.8-123			
LCS Dup (B144195-BSD1)				Prepared & Analyzed: 03/14/16						
Sulfate	20	2.0	mg/L	20.0		98.7	83.8-123	0.00	8.27	
Batch B144309 - SM 21-22 4500 NO3 F										
Blank (B144309-BLK1)				Prepared & Analyzed: 03/15/16						
Nitrate as N	ND	0.050	mg/L							
LCS (B144309-BS1)				Prepared & Analyzed: 03/15/16						
Nitrate as N	2.5		mg/L	2.50		99.6	88.9-111			
LCS Dup (B144309-BSD1)				Prepared & Analyzed: 03/15/16						
Nitrate as N	2.5		mg/L	2.50		99.6	88.9-111	0.00	5.66	

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit
DL	Method Detection Limit
MCL	Maximum Contaminant Level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
3810-RSK175 in Water	
Methane	VA,NY,ME
ASTM D516-07 in Water	
Sulfate	NY,NH,MA,CT,RI,VA,NC
MADEP-VPH-04-1.1 in Water	
Unadjusted C5-C8 Aliphatics	CT,NC,WA,ME,NH-P
C5-C8 Aliphatics	CT,NC,WA,ME,NH-P
Unadjusted C9-C12 Aliphatics	CT,NC,WA,ME,NH-P
C9-C12 Aliphatics	CT,NC,WA,ME,NH-P
C9-C10 Aromatics	CT,NC,WA,ME,NH-P
Benzene	CT,NC,WA,ME,NH-P
Ethylbenzene	CT,NC,WA,ME,NH-P
Methyl tert-Butyl Ether (MTBE)	CT,NC,WA,ME,NH-P
Naphthalene	CT,NC,WA,ME,NH-P
Toluene	CT,NC,WA,ME,NH-P
m+p Xylene	CT,NC,WA,ME,NH-P
o-Xylene	CT,NC,WA,ME,NH-P
SM 21-22 4500 NO3 F in Water	
Nitrate as N	CT,MA,NH,NY,RI,ME,NC,VA
SW-846 6010C/D in Water	
Iron	CT,NH,NY,ME,NC,VA
Manganese	CT,NH,NY,ME,NC,VA

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2018
MA	Massachusetts DEP	M-MA100	06/30/2016
CT	Connecticut Department of Public Health	PH-0567	09/30/2017
NY	New York State Department of Health	10899 NELAP	04/1/2016
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2017
RI	Rhode Island Department of Health	LAO00112	12/30/2016
NC	North Carolina Div. of Water Quality	652	12/31/2016
NJ	New Jersey DEP	MA007 NELAP	06/30/2016
FL	Florida Department of Health	E871027 NELAP	06/30/2016
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2016
WA	State of Washington Department of Ecology	C2065	02/23/2016
ME	State of Maine	2011028	06/9/2017
VA	Commonwealth of Virginia	460217	12/14/2016
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2016



Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com
www.contestlabs.com

CHAIN OF CUSTODY RECORD

39 Spruce Street
East long meadow, MA 01028

Page 1 of 1

Company Name: ECS

Address: 10 State St.

Woburn, MA

Attention: N. Callahan

Project Location: 309 Lowell Street, Andover MA

Sampled By: J. Colby

Project Proposal Provided? (for billing purposes)
☐ Yes ☐ No proposal date

Telephone: 781-246-8897

Project # 214 880

Client PO# Global Alliance 21

DATA DELIVERY (check all that apply)

☐ FAX ☒ EMAIL ☒ WEBSITE

Fax #

Email: NCallahan@ECSconsult.com

Format: ☒ PDF ☒ EXCEL ☐ GIS

☐ OTHER

☐ "Enhanced Data Package"

☐ Matrix Code

☐ Date Data

Collection

Beginning Date/Time

Ending Date/Time

Composite

Grab

Matrix Code

Date Data

3-9-16

15:15

X

GW

9:45

12:20

11:15

13:25

10:35

14:25

V

Is your project MCP or RCP?

☒ MCP Form Required

☐ RCP Form Required

☐ MA State DW Form Required

PWSID #

NELAC & AIHA-LAP, LLC

Accredited

WBE/DBE Certified

Detection Limit Requirements

Massachusetts:

Connecticut:

Other:

Turnaround

☒ 7-Day

☐ 10-Day

☐ Other

RUSH

☐ 24-Hr

☐ 48-Hr

☐ 72-Hr

☐ 14-Day

Require lab approval

Date/Time:

3-9-16

1320

3-9-16

1935

3-9-16

1935

3-9-16

1935

Relinquished by: (signature)

Relinquished by: (signature)

Relinquished by: (signature)

Relinquished by: (signature)

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P: 413-525-2332
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Page 1 of 2

Sample Receipt Checklist

CLIENT NAME: ECS RECEIVED BY: JDL DATE: 3/9/2016

1) Was the chain(s) of custody relinquished and signed? Yes X No No COC Incl.

2) Does the chain agree with the samples? Yes X No

If not, explain:

3) Are all the samples in good condition? Yes X No

If not, explain:

4) How were the samples received:

On Ice X Direct from Sampling Ambient In Cooler(s) X

Were the samples received in Temperature Compliance of (2-6°C)? Yes X No N/A

Temperature °C by Temp blank Temperature °C by Temp gun 3.6

5) Are there Dissolved samples for the lab to filter? Yes No X

Who was notified Date Time

6) Are there any RUSH or SHORT HOLDING TIME samples? Yes X No

Who was notified David Date 9-Mar Time 1935

7) Location where samples are stored:



Permission to subcontract samples? Yes No
(Walk-in clients only) if not already approved
Client Signature:

8) Do all samples have the proper Acid pH: Yes X No N/A

9) Do all samples have the proper Base pH: Yes No N/A X

10) Was the PC notified of any discrepancies with the CoC vs the samples: Yes N/A X

Containers received at Con-Test

	# of containers			# of containers
1 Liter Amber			16 oz amber	
500 mL Amber			8 oz amber/clear jar	
250 mL Amber (8oz amber)			4 oz amber/clear jar	
1 Liter Plastic			2 oz amber/clear jar	
500 mL Plastic	4		Plastic Bag / Ziploc	
250 mL plastic	8		SOC Kit	
40 mL Vial - type listed below	29		Perchlorate Kit	
Colisure / bacteria bottle			Flashpoint bottle	
Dissolved Oxygen bottle			Other glass jar	
Encore			Other	

40 mL vials: # HCl 29 # Methanol Time and Date Frozen:
 Doc# 277 # Bisulfate # DI Water
 Rev. 4 August 2013 # Thiosulfate Unpreserved


Login Sample Receipt Checklist
(Rejection Criteria Listing - Using Sample Acceptance Policy)
Any False statement will be brought to the attention of Client

<u>Question</u>	<u>Answer (True/False)</u>		<u>Comment</u>
	T/F/NA		
1) The cooler's custody seal, if present, is intact.	NA		
2) The cooler or samples do not appear to have been compromised or tampered with.	T		
3) Samples were received on ice.	T		
4) Cooler Temperature is acceptable.	T		
5) Cooler Temperature is recorded.	T		
6) COC is filled out in ink and legible.	T		
7) COC is filled out with all pertinent information.	T		
8) Field Sampler's name present on COC.	T		
9) There are no discrepancies between the sample IDs on the container and the COC.	T		
10) Samples are received within Holding Time.	T		
11) Sample containers have legible labels.	T		
12) Containers are not broken or leaking.	T		
13) Air Cassettes are not broken/open.	NA		
14) Sample collection date/times are provided.	T		
15) Appropriate sample containers are used.	T		
16) Proper collection media used.	T		
17) No headspace sample bottles are completely filled.	T		
18) There is sufficient volume for all requested analyses, including any requested MS/MSDs.	T		
19) Trip blanks provided if applicable.	NA		
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	T		
21) Samples do not require splitting or compositing.	T		

Doc #277 Rev. 4 August 2013 **Who notified of False statements?**
Log-In Technician Initials: JDL

Date/Time:
3/9/16 1935

MADEP MCP Analytical Method Report Certification Form

Laboratory Name: Con-Test Analytical Laboratory				Project #: 16C0395	
Project Location: 309 Lowell St., Andover, MA				RTN:	
This Form provides certifications for the following data set: [list Laboratory Sample ID Number(s)] 16C0395-01 thru 16C0395-07					
Matrices: Water					
CAM Protocol (check all that below)					
8260 VOC CAM II A ()	7470/7471 Hg CAM IIIB ()	MassDEP VPH CAM IV A (X)	8081 Pesticides CAM V B ()	7196 Hex Cr CAM VI B ()	MassDEP APH CAM IX A ()
8270 SVOC CAM II B ()	7010 Metals CAM III C ()	MassDEP EPH CAM IV A ()	8151 Herbicides CAM V C ()	8330 Explosives CAM VIII A ()	TO-15 VOC CAM IX B ()
6010 Metals CAM III A ()	6020 Metals CAM III D ()	8082 PCB CAM V A ()	9014 Total Cyanide/PAC CAM VI A ()	6860 Perchlorate CAM VIII B ()	
Affirmative response to Questions A through F is required for "Presumptive Certainty" status					
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
E a	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
E b	APH and TO-15 Methods only: Was the complete analyte list reported for each method?				<input type="checkbox"/> Yes <input type="checkbox"/> No ¹
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all No responses to Questions A through E)?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
A response to questions G, H and I below is required for "Presumptive Certainty" status					
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.					
H	Were all QC performance standards specified in the CAM protocol(s) achieved?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
¹ All Negative responses must be addressed in an attached Environmental Laboratory case narrative.					
I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.					
Signature: _____ 		Position: Project Manager			
Printed Name: Lisa A. Worthington		Date: 03/18/16			

June 16, 2016

Matt Carey
ECS - Woburn, MA
10 State Street
Woburn, MA 01801

Project Location: 309 Lowell St.
Client Job Number:
Project Number: 95-214880
Laboratory Work Order Number: 16F0459

Enclosed are results of analyses for samples received by the laboratory on June 8, 2016. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "James Georgantas", with a long horizontal flourish extending to the right.

James M. Georgantas
Project Manager

Table of Contents

Sample Summary	3
Case Narrative	4
Sample Results	5
16F0459-01	5
16F0459-02	9
16F0459-03	10
16F0459-04	11
16F0459-05	15
16F0459-06	19
Sample Preparation Information	23
QC Data	24
Petroleum Hydrocarbons Analyses - VPH	24
B151057	24
Miscellaneous Organic Analyses	26
B151324	26
Metals Analyses (Dissolved)	27
B151048	27
Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)	28
B151307	28
B151419	28
Flag/Qualifier Summary	29
Certifications	30
Chain of Custody/Sample Receipt	31

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ECS - Woburn, MA
10 State Street
Woburn, MA 01801
ATTN: Matt Carey

REPORT DATE: 6/16/2016

PURCHASE ORDER NUMBER: Global 21J

PROJECT NUMBER: 95-214880

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 16F0459

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 309 Lowell St.

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-1	16F0459-01	Ground Water		3810-RSK175 ASTM D516-07 MADEP-VPH-04-1.1 SM 21-22 4500 NO3 F SW-846 6010C-D	
MW-2R	16F0459-02	Ground Water		MADEP-VPH-04-1.1	
MW-3	16F0459-03	Ground Water		MADEP-VPH-04-1.1	
OW-12	16F0459-04	Ground Water		3810-RSK175 ASTM D516-07 MADEP-VPH-04-1.1 SM 21-22 4500 NO3 F SW-846 6010C-D	
OW-13	16F0459-05	Ground Water		3810-RSK175 ASTM D516-07 MADEP-VPH-04-1.1 SM 21-22 4500 NO3 F SW-846 6010C-D	
OW-ED	16F0459-06	Ground Water		3810-RSK175 ASTM D516-07 MADEP-VPH-04-1.1 SM 21-22 4500 NO3 F SW-846 6010C-D	

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

REVISED REPORT 06-16-16: Per client request the project location and number have been revised.

MADEP-VPH-04-1.1

No significant modifications were made to the method. All VPH samples were received preserved properly at pH <2 in the proper containers as specified on the chain-of-custody form unless specified in this narrative.

SW-846 6010C/D SW-846 6020A/B

For NC, Metals methods SW-846 6010D and SW-846 6020B are followed, and for all other states methods SW-846 6010C and SW-846 6020A are followed.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

A handwritten signature in black ink, appearing to read "Lisa Worthington", is written over a light gray rectangular background.

Lisa A. Worthington
Project Manager

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St.

Sample Description:

Work Order: 16F0459

Date Received: 6/8/2016

Field Sample #: MW-1

Sampled: 6/7/2016 12:36

Sample ID: 16F0459-01

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/10/16 1:27	EEH
C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/10/16 1:27	EEH
Unadjusted C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/10/16 1:27	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/10/16 1:27	EEH
C9-C10 Aromatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/10/16 1:27	EEH
Benzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/10/16 1:27	EEH
Ethylbenzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/10/16 1:27	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/10/16 1:27	EEH
Naphthalene	ND	5.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/10/16 1:27	EEH
Toluene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/10/16 1:27	EEH
m+p Xylene	ND	2.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/10/16 1:27	EEH
o-Xylene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/10/16 1:27	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2,5-Dibromotoluene (FID)	84.4	70-130							
2,5-Dibromotoluene (PID)	72.8	70-130							

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Project Location: 309 Lowell St.

Sample Description:

Work Order: 16F0459

Date Received: 6/8/2016

Field Sample #: MW-1

Sampled: 6/7/2016 12:36

Sample ID: 16F0459-01

Sample Matrix: Ground Water

Miscellaneous Organic Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methane	3.3	0.0053	mg/L	2		3810-RSK175	6/13/16	6/13/16 12:17	TPH

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Project Location: 309 Lowell St.

Sample Description:

Work Order: 16F0459

Date Received: 6/8/2016

Field Sample #: MW-1

Sampled: 6/7/2016 12:36

Sample ID: 16F0459-01

Sample Matrix: Ground Water

Metals Analyses (Dissolved)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Iron	64	0.050	mg/L	1		SW-846 6010C-D	6/9/16	6/13/16 18:49	AME
Manganese	10	0.010	mg/L	1		SW-846 6010C-D	6/9/16	6/13/16 18:49	AME

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Project Location: 309 Lowell St.

Sample Description:

Work Order: 16F0459

Date Received: 6/8/2016

Field Sample #: MW-1

Sampled: 6/7/2016 12:36

Sample ID: 16F0459-01

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Nitrate as N	ND	0.050	mg/L	1		SM 21-22 4500 NO3 F	6/14/16	6/14/16 17:00	AG
Sulfate	22	2.0	mg/L	1		ASTM D516-07	6/13/16	6/13/16 10:07	MMH

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Project Location: 309 Lowell St.

Sample Description:

Work Order: 16F0459

Date Received: 6/8/2016

Field Sample #: MW-2R

Sampled: 6/7/2016 11:52

Sample ID: 16F0459-02

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 20:03	EEH
C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 20:03	EEH
Unadjusted C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 20:03	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 20:03	EEH
C9-C10 Aromatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 20:03	EEH
Benzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 20:03	EEH
Ethylbenzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 20:03	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 20:03	EEH
Naphthalene	ND	5.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 20:03	EEH
Toluene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 20:03	EEH
m+p Xylene	ND	2.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 20:03	EEH
o-Xylene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 20:03	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2,5-Dibromotoluene (FID)	100	70-130							
2,5-Dibromotoluene (PID)	84.0	70-130							

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Project Location: 309 Lowell St.

Sample Description:

Work Order: 16F0459

Date Received: 6/8/2016

Field Sample #: MW-3

Sampled: 6/7/2016 11:08

Sample ID: 16F0459-03

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 20:39	EEH
C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 20:39	EEH
Unadjusted C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 20:39	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 20:39	EEH
C9-C10 Aromatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 20:39	EEH
Benzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 20:39	EEH
Ethylbenzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 20:39	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 20:39	EEH
Naphthalene	ND	5.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 20:39	EEH
Toluene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 20:39	EEH
m+p Xylene	ND	2.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 20:39	EEH
o-Xylene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 20:39	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2,5-Dibromotoluene (FID)	99.2	70-130							
2,5-Dibromotoluene (PID)	86.8	70-130							

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St.

Sample Description:

Work Order: 16F0459

Date Received: 6/8/2016

Field Sample #: OW-12

Sampled: 6/7/2016 10:03

Sample ID: 16F0459-04

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 21:15	EEH
C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 21:15	EEH
Unadjusted C9-C12 Aliphatics	160	100	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 21:15	EEH
C9-C12 Aliphatics	160	100	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 21:15	EEH
C9-C10 Aromatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 21:15	EEH
Benzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 21:15	EEH
Ethylbenzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 21:15	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 21:15	EEH
Naphthalene	ND	5.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 21:15	EEH
Toluene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 21:15	EEH
m+p Xylene	ND	2.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 21:15	EEH
o-Xylene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 21:15	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2,5-Dibromotoluene (FID)	103	70-130							
2,5-Dibromotoluene (PID)	92.2	70-130							

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St.

Sample Description:

Work Order: 16F0459

Date Received: 6/8/2016

Field Sample #: OW-12

Sampled: 6/7/2016 10:03

Sample ID: 16F0459-04

Sample Matrix: Ground Water

Miscellaneous Organic Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methane	0.11	0.0026	mg/L	1		3810-RSK175	6/13/16	6/13/16 12:33	TPH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St.

Sample Description:

Work Order: 16F0459

Date Received: 6/8/2016

Field Sample #: OW-12

Sampled: 6/7/2016 10:03

Sample ID: 16F0459-04

Sample Matrix: Ground Water

Metals Analyses (Dissolved)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Iron	0.89	0.050	mg/L	1		SW-846 6010C-D	6/9/16	6/13/16 18:54	AME
Manganese	0.54	0.010	mg/L	1		SW-846 6010C-D	6/9/16	6/13/16 18:54	AME

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St.

Sample Description:

Work Order: 16F0459

Date Received: 6/8/2016

Sampled: 6/7/2016 10:03

Field Sample #: OW-12

Sample ID: 16F0459-04

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Nitrate as N	0.22	0.050	mg/L	1		SM 21-22 4500 NO3 F	6/14/16	6/14/16 17:00	AG
Sulfate	21	2.0	mg/L	1		ASTM D516-07	6/13/16	6/13/16 10:07	MMH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St.

Sample Description:

Work Order: 16F0459

Date Received: 6/8/2016

Field Sample #: OW-13

Sampled: 6/7/2016 13:39

Sample ID: 16F0459-05

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	250	100	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/10/16 2:03	EEH
C5-C8 Aliphatics	250	100	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/10/16 2:03	EEH
Unadjusted C9-C12 Aliphatics	690	100	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/10/16 2:03	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/10/16 2:03	EEH
C9-C10 Aromatics	820	100	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/10/16 2:03	EEH
Benzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/10/16 2:03	EEH
Ethylbenzene	14	1.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/10/16 2:03	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/10/16 2:03	EEH
Naphthalene	6.1	5.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/10/16 2:03	EEH
Toluene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/10/16 2:03	EEH
m+p Xylene	23	2.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/10/16 2:03	EEH
o-Xylene	1.9	1.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/10/16 2:03	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2,5-Dibromotoluene (FID)	96.3	70-130							
2,5-Dibromotoluene (PID)	84.2	70-130							

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St.

Sample Description:

Work Order: 16F0459

Date Received: 6/8/2016

Field Sample #: OW-13

Sampled: 6/7/2016 13:39

Sample ID: 16F0459-05

Sample Matrix: Ground Water

Miscellaneous Organic Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methane	1.3	0.0026	mg/L	1		3810-RSK175	6/13/16	6/13/16 13:00	TPH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St.

Sample Description:

Work Order: 16F0459

Date Received: 6/8/2016

Field Sample #: OW-13

Sampled: 6/7/2016 13:39

Sample ID: 16F0459-05

Sample Matrix: Ground Water

Metals Analyses (Dissolved)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Iron	4.4	0.050	mg/L	1		SW-846 6010C-D	6/9/16	6/13/16 19:00	AME
Manganese	0.94	0.010	mg/L	1		SW-846 6010C-D	6/9/16	6/13/16 19:00	AME

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St.

Sample Description:

Work Order: 16F0459

Date Received: 6/8/2016

Field Sample #: OW-13

Sampled: 6/7/2016 13:39

Sample ID: 16F0459-05

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Nitrate as N	0.19	0.050	mg/L	1		SM 21-22 4500 NO3 F	6/14/16	6/14/16 17:00	AG
Sulfate	15	2.0	mg/L	1		ASTM D516-07	6/13/16	6/13/16 10:07	MMH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St.

Sample Description:

Work Order: 16F0459

Date Received: 6/8/2016

Field Sample #: OW-ED

Sampled: 6/7/2016 08:57

Sample ID: 16F0459-06

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 21:51	EEH
C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 21:51	EEH
Unadjusted C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 21:51	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 21:51	EEH
C9-C10 Aromatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 21:51	EEH
Benzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 21:51	EEH
Ethylbenzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 21:51	EEH
Methyl tert-Butyl Ether (MTBE)	7.9	1.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 21:51	EEH
Naphthalene	ND	5.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 21:51	EEH
Toluene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 21:51	EEH
m+p Xylene	ND	2.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 21:51	EEH
o-Xylene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/9/16	6/9/16 21:51	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2,5-Dibromotoluene (FID)	97.4	70-130							
2,5-Dibromotoluene (PID)	85.4	70-130							

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St.

Sample Description:

Work Order: 16F0459

Date Received: 6/8/2016

Sampled: 6/7/2016 08:57

Field Sample #: OW-ED

Sample ID: 16F0459-06

Sample Matrix: Ground Water

Miscellaneous Organic Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methane	ND	0.0026	mg/L	1		3810-RSK175	6/13/16	6/13/16 13:14	TPH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St.

Sample Description:

Work Order: 16F0459

Date Received: 6/8/2016

Field Sample #: OW-ED

Sampled: 6/7/2016 08:57

Sample ID: 16F0459-06

Sample Matrix: Ground Water

Metals Analyses (Dissolved)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Iron	ND	0.050	mg/L	1		SW-846 6010C-D	6/9/16	6/13/16 19:04	AME
Manganese	0.012	0.010	mg/L	1		SW-846 6010C-D	6/9/16	6/13/16 19:04	AME

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 309 Lowell St.

Sample Description:

Work Order: 16F0459

Date Received: 6/8/2016

Sampled: 6/7/2016 08:57

Field Sample #: OW-ED

Sample ID: 16F0459-06

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Nitrate as N	ND	0.050	mg/L	1		SM 21-22 4500 NO3 F	6/14/16	6/14/16 17:00	AG
Sulfate	34	2.0	mg/L	1		ASTM D516-07	6/13/16	6/13/16 10:07	MMH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data**3810-RSK175**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
16F0459-01 [MW-1]	B151324	1.00	1.00	06/13/16
16F0459-04 [OW-12]	B151324	1.00	1.00	06/13/16
16F0459-05 [OW-13]	B151324	1.00	1.00	06/13/16
16F0459-06 [OW-ED]	B151324	1.00	1.00	06/13/16

ASTM D516-07

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
16F0459-01 [MW-1]	B151307	100	100	06/13/16
16F0459-04 [OW-12]	B151307	100	100	06/13/16
16F0459-05 [OW-13]	B151307	100	100	06/13/16
16F0459-06 [OW-ED]	B151307	100	100	06/13/16

Prep Method: MA VPH-MADEP-VPH-04-1.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
16F0459-01 [MW-1]	B151057	5	5.00	06/09/16
16F0459-02 [MW-2R]	B151057	5	5.00	06/09/16
16F0459-03 [MW-3]	B151057	5	5.00	06/09/16
16F0459-04 [OW-12]	B151057	5	5.00	06/09/16
16F0459-05 [OW-13]	B151057	5	5.00	06/09/16
16F0459-06 [OW-ED]	B151057	5	5.00	06/09/16

SM 21-22 4500 NO3 F

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
16F0459-01 [MW-1]	B151419	25.0	25.0	06/14/16
16F0459-04 [OW-12]	B151419	25.0	25.0	06/14/16
16F0459-05 [OW-13]	B151419	25.0	25.0	06/14/16
16F0459-06 [OW-ED]	B151419	25.0	25.0	06/14/16

Prep Method: SW-846 3005A Dissolved-SW-846 6010C-D

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
16F0459-01 [MW-1]	B151048	50.0	50.0	06/09/16
16F0459-04 [OW-12]	B151048	50.0	50.0	06/09/16
16F0459-05 [OW-13]	B151048	50.0	50.0	06/09/16
16F0459-06 [OW-ED]	B151048	50.0	50.0	06/09/16

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Petroleum Hydrocarbons Analyses - VPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B151057 - MA VPH
Blank (B151057-BLK1)

Prepared & Analyzed: 06/09/16

Unadjusted C5-C8 Aliphatics	ND	100	µg/L							
C5-C8 Aliphatics	ND	100	µg/L							
Unadjusted C9-C12 Aliphatics	ND	100	µg/L							
C9-C12 Aliphatics	ND	100	µg/L							
C9-C10 Aromatics	ND	100	µg/L							
Benzene	ND	1.0	µg/L							
Butylcyclohexane	ND	1.0	µg/L							
Decane	ND	1.0	µg/L							
Ethylbenzene	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
2-Methylpentane	ND	1.0	µg/L							
Naphthalene	ND	5.0	µg/L							
Nonane	ND	1.0	µg/L							
Pentane	ND	1.0	µg/L							
Toluene	ND	1.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
2,2,4-Trimethylpentane	ND	1.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 2,5-Dibromotoluene (FID)	41.3		µg/L	40.0		103	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	35.0		µg/L	40.0		87.4	70-130			

LCS (B151057-BS1)

Prepared & Analyzed: 06/09/16

Benzene	91.1	1.0	µg/L	100		91.1	70-130			
Butylcyclohexane	86.6	1.0	µg/L	100		86.6	70-130			
Decane	94.7	1.0	µg/L	100		94.7	70-130			
Ethylbenzene	94.2	1.0	µg/L	100		94.2	70-130			
Methyl tert-Butyl Ether (MTBE)	102	1.0	µg/L	100		102	70-130			
2-Methylpentane	98.8	1.0	µg/L	100		98.8	70-130			
Naphthalene	80.2	5.0	µg/L	100		80.2	70-130			
Nonane	92.9	1.0	µg/L	100		92.9	30-130			
Pentane	79.3	1.0	µg/L	100		79.3	70-130			
Toluene	94.2	1.0	µg/L	100		94.2	70-130			
1,2,4-Trimethylbenzene	86.4	1.0	µg/L	100		86.4	70-130			
2,2,4-Trimethylpentane	90.5	1.0	µg/L	100		90.5	70-130			
m+p Xylene	183	2.0	µg/L	200		91.4	70-130			
o-Xylene	91.0	1.0	µg/L	100		91.0	70-130			
Surrogate: 2,5-Dibromotoluene (FID)	37.6		µg/L	40.0		94.0	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	34.5		µg/L	40.0		86.2	70-130			

LCS Dup (B151057-BSD1)

Prepared & Analyzed: 06/09/16

Benzene	86.8	1.0	µg/L	100		86.8	70-130	4.76	25	
Butylcyclohexane	87.2	1.0	µg/L	100		87.2	70-130	0.687	25	
Decane	95.9	1.0	µg/L	100		95.9	70-130	1.18	25	
Ethylbenzene	92.1	1.0	µg/L	100		92.1	70-130	2.17	25	
Methyl tert-Butyl Ether (MTBE)	100	1.0	µg/L	100		100	70-130	1.57	25	
2-Methylpentane	93.0	1.0	µg/L	100		93.0	70-130	5.95	25	
Naphthalene	80.4	5.0	µg/L	100		80.4	70-130	0.347	25	
Nonane	93.5	1.0	µg/L	100		93.5	30-130	0.687	25	
Pentane	75.4	1.0	µg/L	100		75.4	70-130	5.09	25	
Toluene	93.5	1.0	µg/L	100		93.5	70-130	0.740	25	
1,2,4-Trimethylbenzene	85.5	1.0	µg/L	100		85.5	70-130	1.11	25	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Petroleum Hydrocarbons Analyses - VPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B151057 - MA VPH
LCS Dup (B151057-BSD1)

Prepared & Analyzed: 06/09/16

2,2,4-Trimethylpentane	88.7	1.0	µg/L	100		88.7	70-130	1.97	25	
m+p Xylene	179	2.0	µg/L	200		89.7	70-130	1.87	25	
o-Xylene	89.6	1.0	µg/L	100		89.6	70-130	1.54	25	
Surrogate: 2,5-Dibromotoluene (FID)	41.3		µg/L	40.0		103	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	33.1		µg/L	40.0		82.7	70-130			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Miscellaneous Organic Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B151324 - 3810-RSK175
Blank (B151324-BLK1)

Prepared & Analyzed: 06/13/16

Methane	ND	0.0026	mg/L
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LCS (B151324-BS1)

Prepared & Analyzed: 06/13/16

Methane	2000		mg/L	2000	100	56-121
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Duplicate (B151324-DUP1)
Source: 16F0459-04

Prepared & Analyzed: 06/13/16

Methane	0.102	0.0026	mg/L	0.111	7.99
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QUALITY CONTROL
Metals Analyses (Dissolved) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B151048 - SW-846 3005A Dissolved										
Blank (B151048-BLK1)				Prepared: 06/09/16 Analyzed: 06/13/16						
Iron	ND	0.050	mg/L							
Manganese	ND	0.010	mg/L							
LCS (B151048-BS1)				Prepared: 06/09/16 Analyzed: 06/13/16						
Iron	0.514	0.050	mg/L	0.500		103	80-120			
Manganese	0.518	0.010	mg/L	0.500		104	80-120			
LCS Dup (B151048-BSD1)				Prepared: 06/09/16 Analyzed: 06/13/16						
Iron	0.509	0.050	mg/L	0.500		102	80-120	1.13	20	
Manganese	0.509	0.010	mg/L	0.500		102	80-120	1.64	20	

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QUALITY CONTROL
Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B151307 - ASTM D516-07										
Blank (B151307-BLK1)				Prepared & Analyzed: 06/13/16						
Sulfate	ND	2.0	mg/L							
LCS (B151307-BS1)				Prepared & Analyzed: 06/13/16						
Sulfate	20	2.0	mg/L	20.0		100	81.9-119			
LCS Dup (B151307-BSD1)				Prepared & Analyzed: 06/13/16						
Sulfate	20	2.0	mg/L	20.0		101	81.9-119	0.449	5.17	
Batch B151419 - SM 21-22 4500 NO3 F										
Blank (B151419-BLK1)				Prepared & Analyzed: 06/14/16						
Nitrate as N	ND	0.050	mg/L							
LCS (B151419-BS1)				Prepared & Analyzed: 06/14/16						
Nitrate as N	2.8		mg/L	2.50		110	85.9-112			
LCS Dup (B151419-BSD1)				Prepared & Analyzed: 06/14/16						
Nitrate as N	2.8		mg/L	2.50		110	85.9-112	0.00	11.9	

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit
DL	Method Detection Limit
MCL	Maximum Contaminant Level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
3810-RSK175 in Water	
Methane	VA,NY,ME
ASTM D516-07 in Water	
Sulfate	NY,NH,MA,CT,RI,VA,NC
MADEP-VPH-04-1.1 in Water	
Unadjusted C5-C8 Aliphatics	CT,NC,ME,NH-P
C5-C8 Aliphatics	CT,NC,ME,NH-P
Unadjusted C9-C12 Aliphatics	CT,NC,ME,NH-P
C9-C12 Aliphatics	CT,NC,ME,NH-P
C9-C10 Aromatics	CT,NC,ME,NH-P
Benzene	CT,NC,ME,NH-P
Ethylbenzene	CT,NC,ME,NH-P
Methyl tert-Butyl Ether (MTBE)	CT,NC,ME,NH-P
Naphthalene	CT,NC,ME,NH-P
Toluene	CT,NC,ME,NH-P
m+p Xylene	CT,NC,ME,NH-P
o-Xylene	CT,NC,ME,NH-P
SM 21-22 4500 NO3 F in Water	
Nitrate as N	CT,MA,NH,NY,RI,ME,NC,VA
SW-846 6010C-D in Water	
Iron	CT,NH,NY,ME,NC,VA
Manganese	CT,NH,NY,ME,NC,VA

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2018
MA	Massachusetts DEP	M-MA100	06/30/2016
CT	Connecticut Department of Public Health	PH-0567	09/30/2017
NY	New York State Department of Health	10899 NELAP	04/1/2017
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2017
RI	Rhode Island Department of Health	LAO00112	12/30/2016
NC	North Carolina Div. of Water Quality	652	12/31/2016
NJ	New Jersey DEP	MA007 NELAP	06/30/2016
FL	Florida Department of Health	E871027 NELAP	06/30/2017
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2016
ME	State of Maine	2011028	06/9/2017
VA	Commonwealth of Virginia	460217	12/14/2016
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2016

39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F: 413-525-6405
www.contestlabs.com



Page 1 of 2

Sample Receipt Checklist

CLIENT NAME: ECS RECEIVED BY: JDL DATE: 6/8/16

1) Was the chain(s) of custody relinquished and signed? Yes X No No COC Incl.

2) Does the chain agree with the samples? Yes X No

If not, explain:

3) Are all the samples in good condition? Yes X No

If not, explain:

4) How were the samples received:

On Ice X Direct from Sampling Ambient In Cooler(s) X

Were the samples received in Temperature Compliance of (2-6°C)? Yes X No N/A

Temperature °C by Temp blank Temperature °C by Temp gun 3.7

5) Are there Dissolved samples for the lab to filter? Yes No X

Who was notified Date Time

6) Are there any RUSH or SHORT HOLDING TIME samples? Yes X No

Who was notified Amber Date 6/8 Time 1455

7) Location where samples are stored:

19

Permission to subcontract samples? Yes No
(Walk-in clients only) if not already approved
Client Signature:

8) Do all samples have the proper Acid pH: Yes X No N/A

9) Do all samples have the proper Base pH: Yes No N/A X

10) Was the PC notified of any discrepancies with the CoC vs the samples: Yes N/A X

Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber		16 oz amber	
500 mL Amber		8 oz amber/clear jar	
250 mL Amber (8oz amber)		4 oz amber/clear jar	
1 Liter Plastic		2 oz amber/clear jar	
500 mL Plastic	<u>12</u>	Plastic Bag / Ziploc	
250 mL plastic		SOC Kit	
40 mL Vial - type listed below	<u>26</u>	Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

40 mL vials: # HCl 26 # Methanol

Time and Date Frozen:

Doc# 277 # Bisulfate # DI Water

Rev. 4 August 2013 # Thiosulfate Unpreserved

Login Sample Receipt Checklist**(Rejection Criteria Listing - Using Sample Acceptance Policy)****Any False statement will be brought to the attention of Client**

Question	Answer (True/False)		Comment
	T/F/NA		
1) The cooler's custody seal, if present, is intact.	NA		
2) The cooler or samples do not appear to have been compromised or tampered with.	T		
3) Samples were received on ice.	T		
4) Cooler Temperature is acceptable.	T		
5) Cooler Temperature is recorded.	T		
6) COC is filled out in ink and legible.	T		
7) COC is filled out with all pertinent information.	T		
8) Field Sampler's name present on COC.	T		
9) There are no discrepancies between the sample IDs on the container and the COC.	T		
10) Samples are received within Holding Time.	T		
11) Sample containers have legible labels.	T		
12) Containers are not broken or leaking.	T		
13) Air Cassettes are not broken/open.	NA		
14) Sample collection date/times are provided.	T		
15) Appropriate sample containers are used.	T		
16) Proper collection media used.	T		
17) No headspace sample bottles are completely filled.	T		
18) There is sufficient volume for all requested analyses, including any requested MS/MSDs.	T		
19) Trip blanks provided if applicable.	NA		
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	T		
21) Samples do not require splitting or compositing.	T		

Doc #277 Rev. 4 August 2013

Who notified of False statements?

Login Technician Initials:

JDL

Date/Time:

Date/Time:

6/8/16 1455

MADEP MCP Analytical Method Report Certification Form

Laboratory Name: Con-Test Analytical Laboratory	Project #: 16F0459
Project Location: 309 Cowell St.	RTN:

This Form provides certifications for the following data set: [list Laboratory Sample ID Number(s)]

16F0459-01 thru 16F0459-06

Matrices: Water

CAM Protocol (check all that below)

8260 VOC CAM II A ()	7470/7471 Hg CAM IIIB ()	MassDEP VPH CAM IV A (X)	8081 Pesticides CAM V B ()	7196 Hex Cr CAM VI B ()	MassDEP APH CAM IX A ()
8270 SVOC CAM II B ()	7010 Metals CAM III C ()	MassDEP EPH CAM IV A ()	8151 Herbicides CAM V C ()	8330 Explosives CAM VIII A ()	TO-15 VOC CAM IX B ()
6010 Metals CAM III A ()	6020 Metals CAM III D ()	8082 PCB CAM V A ()	9014 Total Cyanide/PAC CAM VI A ()	6860 Perchlorate CAM VIII B ()	

Affirmative response to Questions A through F is required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
E a	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
E b	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	<input type="checkbox"/> Yes <input type="checkbox"/> No ¹
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all No responses to Questions A through E)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹

A response to questions G, H and I below is required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
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Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹

¹ All Negative responses must be addressed in an attached Environmental Laboratory case narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: Lisa Worthington

Position: Project Manager

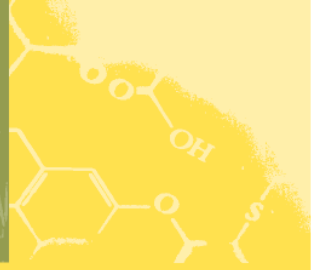
Printed Name: Lisa A. Worthington

Date: 06/15/16

ATTACHMENT IV



WHERE BUSINESS AND THE ENVIRONMENT CONVERGE



August 23, 2016
ECS Project No. 95-214880

10 State Street, Woburn, MA 01801 tel 781.246.8897 fax 781.246.8950 www.ecsconsult.com

Town of Andover
Department of Community Development and Planning
Board of Health Department
36 Bartlett Street
Andover, Massachusetts 01810

RE: **Notice of Document Availability**
Mobil Station #1436
Global Companies LLC
309 Lowell Street
Andover, Massachusetts
MassDEP RTN 3-3072

To Whom It May Concern:

Pursuant to the Massachusetts Contingency Plan (MCP) 310 CMR 40.1405 and the Public Involvement Plan (PIP) dated April 21, 1999, Environmental Compliance Services, Inc. (ECS) has prepared this letter on behalf of Global Companies LLC (Global) to inform you that a Phase V – Remedy Operation Status (ROS) report was submitted to the Massachusetts Department of Environmental Protection (MassDEP) on August 28, 2016. The report was submitted to the MassDEP for Release Tracking Number (RTN) 3-3072 assigned to the commercial property located at 309 Lowell Street, Andover, MA (the “Site”).

A copy of the Phase V – ROS report is included for your files, as you are a designated document repository in accordance with the PIP. Notifications of the availability of this document will be forwarded to the parties on the PIP mailing list.

If you should have any questions concerning this submittal, please do not hesitate to contact our office.

Sincerely,
Environmental Compliance Services, Inc.

Matthew Carey
Senior Project Manager

cc: Memorial Hall Library, Elm Square, Andover, MA – UPS

WHERE BUSINESS AND THE ENVIRONMENT CONVERGE

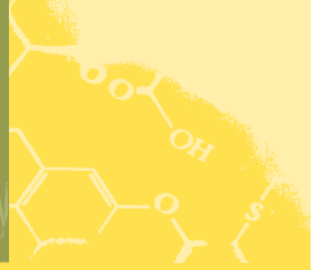
NATIONWIDE COVERAGE   

In the following states ECS operates as:

Indiana – ECS of Indiana, Inc.; Arizona – Environmental Compliance Services of Arizona, Inc.; Georgia – Environmental Compliance Services of Georgia, Inc.; Michigan – Environmental Compliance Services of Michigan, Inc.; Mississippi – Environmental Compliance Services, Inc. of Mississippi; Louisiana – Environmental Compliance Services, Inc. of Louisiana; Nebraska – Pangean Environmental Compliance Services, Inc.; Texas – Pangean Environmental Compliance Services, Inc. In North Carolina, engineering and geological services are provided by Environmental Compliance Services of North Carolina, P.C.



WHERE BUSINESS AND THE ENVIRONMENT CONVERGE



10 State Street, Woburn, MA 01801 tel 781.246.8897 fax 781.246.8950 www.ecsconsult.com

August 23, 2016
ECS Project No. 95-214880

Memorial Hall Library
Elm Square
2 North Main Street
Andover, Massachusetts 01810

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Mobil Station #1436
Global Companies LLC
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If you should have any questions concerning this submittal, please do not hesitate to contact our office.

Sincerely,
Environmental Compliance Services, Inc.

Matthew Carey
Senior Project Manager

cc: Town of Andover, Board of Health – UPS

WHERE BUSINESS AND THE ENVIRONMENT CONVERGE

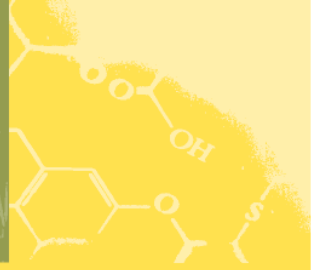
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WHERE BUSINESS AND THE ENVIRONMENT CONVERGE



10 State Street, Woburn, MA 01801 tel 781.246.8897 fax 781.246.8950 www.ecsconsult.com

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Should you wish to view the Phase V – ROS report, copies were submitted to the following document repositories in accordance with the PIP:

Memorial Hall Library
Elm Square
Andover, MA 01810
Tel: (978) 623-8400

Department of Community Development and Planning
Board of Health Department
36 Bartlett Street
Andover, MA 01810
Tel: (978) 623-8295

Additional public involvement opportunities are available to you under 310 CMR 40.1405. If you have any questions or require additional information regarding this submittal, feel free to contact the undersigned at 781-246-8897.

Sincerely,
Environmental Compliance Services, Inc.



Matthew Carey
Senior Project Manager

WHERE BUSINESS AND THE ENVIRONMENT CONVERGE

NATIONWIDE COVERAGE   

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